Response to Comments on Draft Class VI Permit Issued to Archer Daniels Midland (ADM)

United States Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

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INTRODUCTION

On October 2, 2014, the United States Environmental Protection Agency (EPA) issued a draft Class VI permit to inject carbon dioxide for the purpose of geologic sequestration (permit number IL-115-6A-0002) to Archer Daniels Midland (ADM) for its CCS#1 well, and invited public comment.

No comments were received during a public hearing held on November 5, 2014. Five parties submitted written comments to EPA. These commenters are listed in Table 1.

This document categorizes the public comments submitted on the draft Class VI permit and includes EPA's responses to those comments. Where similar comments were submitted, EPA provided a single response (these common responses are denoted in the sections below).

This document is organized as follows.

- Section 1: General Comments: comments generally supporting or opposing the draft permit action or about the permitting process; geologic sequestration; the geology of the ADM site; and general permit conditions.
- Section 2: Area of Review (AoR) and Corrective Action Comments: AoR reevaluations; AoR Plan updates; Part G of the draft permit; and Attachment B.
- Section 3: Construction and Pre-Injection Testing Comments: comments on the injection well components (e.g., casing/cement and tubing/packer); Parts I and J of the draft permit; and Attachment G.
- Section 4: Testing, Monitoring, Plugging, and Post-Injection Site Care Comments: comments on the testing and monitoring activities (e.g., mechanical integrity testing, ground water monitoring, and plume and pressure front tracking); post-injection monitoring; the post-injection site care (PISC) timeframe; the non-endangerment demonstration; site closure activities; Parts M and O of the draft permit; Attachments C, D, and E; and the quality assurance and surveillance plan (QASP) for testing and monitoring activities.
- Section 5: Emergency and Remedial Response Comments: comments on Part P of the draft permit; and Attachment F.

Table 1: Commenters on the ADM CCS#1 draft Class VI permit

Archer Daniels Midland Company (ADM)
Illinois Historic Preservation Agency
Tracy Slater
U.S. Carbon Sequestration Council (CSC)
U.S. Fish and Wildlife Service

SECTION 1. GENERAL COMMENTS

1. Illinois Historic Preservation Agency

We have reviewed the documentation submitted for the referenced project(s) in accordance with 36 CFR Part 800.4. Based upon the information provided, no historic properties are affected. We, therefore, have no objection to the undertaking proceeding as planned. Please retain this letter in your files as evidence of compliance with section 106 of the National Historic Preservation Act of 1966, as amended. This clearance remains in effect for two (2) years from date of issuance. It does not pertain to any discovery during construction, nor is it clearance for purposes of the Illinois Human Skeletal Remains Protection Act (20 ILCS 3440). If you are an applicant, please submit a copy of this letter to the state or federal agency from which you obtain any permit, license, grant, or other assistance.

Response

This comment did not request, and does not require, a change to the draft permit.

2. Tracy Slater

Once the CO2 is injected into the earth where does it go?

Response

The injection zone for the carbon dioxide (CO_2) is the Mount Simon Sandstone, a layer of rock that is more than 5,500 feet deep at the well site. The CO_2 will be stored in the pore spaces of the Mount Simon Sandstone. EPA has permitted the injection zone between 5,545 feet and 7,051 feet deep. ADM ran a complex computational model to predict the movement of the CO_2 after it is injected into the well, and EPA has independently verified the modeling results. The computational model shows the CO_2 will remain beneath the confining zone and will extend laterally two miles from the injection well (Attachment B, Figure 7 of EPA's final permit).

This comment did not request, and does not require, a change to the draft permit.

3. Tracy Slater

Has there been any long term test to determine what the affects will be on the soil in that location and will it be contained to the injection site?

Response

ADM ran a complex computational model to predict the movement of the CO_2 after it is injected into the well, and EPA has independently verified the modeling results. The computational model shows the CO_2 will remain within two miles of the injection well (Attachment B, Figure 7 of EPA's final permit).

ADM has been injecting CO_2 at this well since 2011 under a Class I permit issued by the Illinois EPA. EPA has permitted the injection zone as the Mount Simon Sandstone between 5,545 feet and 7,051 feet below the ground surface. A layer of impermeable rock, the Eau Claire Shale, is the permitted confining zone. The Eau Claire Shale is located just above the injection zone, and it will act as a barrier to fluid movement, ensuring that the CO_2 remains in place and does not endanger Underground Sources of Drinking Water (USDWs). The base of the lowermost USDW is at approximately 2,604 feet below the ground surface, or more than 2,941 feet above the injection zone. As it will be confined more than 5,500 feet below ground by many geologic confining zones, the possibility of the ADM project causing any effect on the surface soils is remote.

This comment did not request, and does not require, a change to the draft permit.

4. Tracy Slater

What precautions are there to make certain that the CO2 doesn't leach into the water supply?

Response

EPA has permitted the injection zone as the Mount Simon Sandstone between 5,545 feet and 7,051 feet below the ground surface. A layer of impermeable rock, the Eau Claire Shale, is the permitted confining zone. The Eau Claire Shale is located just above the injection zone and it will act as a barrier to fluid movement, ensuring that the CO_2 remains in place and does not endanger USDWs. The base of the lowermost USDW is at approximately 2,604 feet below the ground surface, or more than 2,941 feet above the injection zone.

Throughout the life of the project, ADM will implement a Testing and Monitoring Plan that includes monitoring of the CO_2, the well, groundwater quality, and the position of the carbon dioxide plume and pressure front. ADM and EPA will review the monitoring and operational data. If, based on the results of such monitoring, there is reason to believe that the project is posing a risk to USDWs, human health and the environment, there are permit conditions that require ADM to cease injection and implement its Emergency and Remedial Response Plan.

As proposed in the draft permit and contained in Attachment F of EPA's final permit, the Emergency and Remedial Response Plan identifies potential adverse incidents that will be watched for throughout the life of the project. The Plan identifies response actions to be taken to mitigate any potential endangerment of USDWs.

This comment did not request, and does not require, a change to the draft permit.

5. ADM

Provision: A

Text of Draft Permit: For purposes of enforcement, compliance with this permit during its term constitutes compliance with Part C of the Safe Drinking Water Act (SDWA).

References: **§ 144.35 Effect of a permit.** (a) Except for Class II and III wells, compliance with a permit during its term constitutes compliance, for purposes of enforcement, with Part C of the SDWA. However, a permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in §§ 144.39 and 144.40.

Proposed Revision: No revision is required.

Comment: We commend EPA for including this very important and fundamental provision. This language in Condition A of the permit reflects 40 CFR §144.35, which provides a permit shield for permittees who have applied for and received permits under the regulatory provisions of Part C of the Safe Drinking Water Act (SDWA). The qualification for a permit shield is a fundamental tenent of EPA permitting programs. As noted by the United States Supreme Court, the purpose of a permit shield is "to insulate permit holders from changes in various regulations during the period of a permit and to relieve them of having to litigate in an enforcement action the question whether their permits are sufficiently strict." *E. I. du Pont de Nemours & Co. v. Train*, 430 U.S. 112, 138 n. 28 (1977). That is, this provision "serves the purpose of giving permits finality." *Id.*

Unfortunately, a number of the subsequent conditions of the draft permit contain language that deny the permit finality and could subject the permittee to questions about whether the permit is sufficiently strict. As will be noted, the wording of these provisions is contrary to 40 CFR §144.35 and, therefore, the imposition of such a condition would constitute a conclusion of law that is clearly erroneous.

As indicated by the second sentence of 40 CFR §144.35(a), EPA cannot simply seek to impose a stricter requirement by asserting the regulatory provision pursuant to which the permit condition is approved. Instead, EPA must follow the procedures of 40 CFR §§144.39 and 144.40 to impose a stricter requirement. EPA cannot subvert the permit shield provision of 40 CFR §144.35 by simply imposing in permit conditions a separate requirement to also comply with the regulatory provision that the condition is designed to meet.

6. CSC

Provision: A

Text of Draft Permit: For purposes of enforcement, compliance with this permit during its term constitutes compliance with Part C of the Safe Drinking Water Act (SDWA).

References: § 144.35 Effect of a permit. (a) Except for Class II and III wells, compliance with a permit during its term constitutes compliance, for purposes of enforcement, with Part C of the SDWA. However, a permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in §§ 144.39 and 144.40.

Proposed Revision: No revision is necessary for this draft provision.

Comment: We commend EPA for including this very important and fundamental provision. This language in Condition A of the permit reflects 40 CFR §144.35, which provides a permit shield for permittees who have applied for and received permits under the regulatory provisions of Part C of the Safe Drinking Water Act (SDWA). The qualification for a permit shield is a fundamental tenet of EPA permitting programs. As noted by the United States Supreme Court, the purpose of a permit shield is "to insulate permit holders from changes in various regulations during the period of a permit and to relieve them of having to litigate in an enforcement action the question whether their permits are sufficiently strict." E. I. du Pont de Nemours & Co. v. Train, 430 U.S. 112, 138 n. 28 (1977). That is, this provision "serves the purpose of giving permits finality." Id.

Unfortunately, a number of the subsequent conditions of the draft permit contain language that denies the permit finality and would subject the permittee to questions about whether the permit is sufficiently strict. As will be noted, the wording of these provisions is contrary to section 144.35 and, therefore, the imposition of such a condition would constitute a conclusion of law that is clearly erroneous.

As indicated by the second sentence of section 144.35(a), EPA cannot simply seek to impose a stricter requirement by asserting some different interpretation of the regulatory provision pursuant to which the permit condition is approved. Instead, EPA must follow the procedures of sections 144.39 and 144.40 to impose a stricter requirement. EPA cannot subvert the permit shield provision of section 144.35 by simply imposing in permit conditions a separate requirement to also comply with the regulatory provision that the condition is designed to meet.

Response (to comments 5 and 6)

These comments did not request, and do not require, a change to the draft permit.

7. ADM

Provision: B(1)

Text of Draft Permit: Modification, Revocation and Reissuance, and Termination – The Director of the Water Division of Region 5 of the U. S. Environmental Protection Agency (EPA), hereinafter, the Director, may, for cause or upon request from any interested person, including the permittee, modify, revoke and reissue, or terminate this permit in accordance with 40 CFR 124.5, 144.12, 146.86(a), 144.39, and 144.40. The permit is also subject to minor modifications for cause as specified in 40 CFR 144.41. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes, or anticipated noncompliance on the part of the permittee does not stay the applicability or enforceability of any permit condition.

References: **§124.5 Modification, revocation and reissuance, or termination of permits.** (a) (Applicable to State programs, see §§123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA).) Permits (other than PSD permits) may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon the Director's initiative. However, permits may only be modified, revoked and reissued, or terminated for the reasons specified in §122.62 or §122.64 (NPDES), 144.39 or 144.40 (UIC), 233.14 or 233.15 (404), and 270.41 or 270.43 (RCRA). All requests shall be in writing and shall contain facts or reasons supporting the request.

Proposed Revision: No revision is necessary.

Comment: This condition correctly describes the process that must be followed by the Director to impose stricter obligations once the permit is approved and issued as final. It is not appropriate to undercut this process and deny the permittee the intended process protections by including in permit conditions an additional requirement to meet the specific regulatory provision that the Director has determined is satisfied by the condition or plan approved in the permit. Additional support for this comment is provided in the comments on Conditions A and G(1), which are incorporated herein by reference.

8. CSC

Provision: B(1)

Text of Draft Permit: Modification, Revocation and Reissuance, and Termination – The Director of the Water Division of Region 5 of the U. S. Environmental Protection Agency (EPA), hereinafter, the Director, may, for cause or upon request from any interested person, including the permittee, modify, revoke and reissue, or terminate this permit in accordance with 40 CFR 124.5, 144.12, 146.86(a), 144.39, and 144.40. The permit is also subject to minor modifications for cause as specified in 40 CFR 144.41. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes, or anticipated noncompliance on the part of the permittee does not stay the applicability or enforceability of any permit condition.

References: **§124.5 Modification, revocation and reissuance, or termination of permits.** (a) (Applicable to State programs, see §§123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA).) Permits (other than PSD permits) may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon the Director's initiative. However, permits may only be modified, revoked and reissued, or terminated for the reasons specified in §122.62 or §122.64 (NPDES), 144.39 or 144.40 (UIC), 233.14 or 233.15 (404), and 270.41 or 270.43 (RCRA). All requests shall be in writing and shall contain facts or reasons supporting the request.

Proposed Revision: No revision is necessary for this draft provision.

Comment: This condition correctly describes the process that must be followed by the Director to impose stricter obligations once the permit is approved and issued as final. It is not appropriate to undercut this process and deny the permittee the intended process protections by including in permit conditions an additional requirement to meet the specific regulatory provision that the Director has determined is satisfied by the condition.

Response (to comments 7 and 8)

These comments did not request, and do not require, a change to the draft permit.

9. CSC

We commend EPA for the work that has been undertaken to process the first of a kind permits for the ADM wells and the FutureGen Alliance wells. The CSC has followed closely the development of the regulatory framework for the Class VI underground injection control (UIC) program and has provided extensive comments on the proposed rule first published by EPA on July 25, 2008 (73 FR 43492), on other related parts of the regulatory framework, including the draft guidance documents that EPA has published for the Class VI UIC program, and on the draft Class VI FutureGen and ADM well CCS#2 permits. Officials of the EPA UIC program in Washington and in the EPA regions have emphasized that these initial permitting actions should be viewed as a learning process, and there are important lessons that remain to be learned. We seek to ensure that permits are appropriate and consistent with the flexible and adaptable Class VI regulatory framework promulgated by EPA.

Our primary interest, and our reason for commenting on this draft permit, is directed at the potential precedents being established for future Class VI permits that may be issued by EPA Region 5, other EPA regions and State primacy programs. We are concerned that the Class VI permits issued to date contain significant flaws, but we have refrained from seeking review of those permits in order to avoid delaying the implementation of important experimental and development projects. We want to make sure that future permits, the conditions contained therein, and the plans approved as part of permits are consistent with the regulatory requirements and designed to assist with full understanding of the requirements and safeguards of Class VI permits. Our comments are designed to correct past flaws and improve the clarity and accuracy of future Class VI permits.

We commend EPA for the very important and fundamental recognition in Section A of the draft permit that "[f]or purposes of enforcement, compliance with this permit during its term constitutes compliance with Part C of the Safe Drinking Water Act (SDWA)". This condition is based on 40 CFR section 144.35 and reflects a fundamental tenet of EPA permitting programs. Permit applicants are called upon to submit their plans and proposals for complying with the regulatory permit requirements that have been promulgated by EPA based on the underlying legislative mandates enacted by the U.S. Congress to achieve specific statutory objectives. In this case, the permit applications provide for compliance with the UIC program requirements promulgated by EPA pursuant to Part C of the Safe Drinking Water Act (SDWA) to protect underground sources of drinking water (USDWs) from endangerment consistent with the mandate of that statute. As EPA has recognized in numerous provisions of the draft permit, the approved application, the required plans, and the individualized permit conditions provide for compliance with the promulgated regulatory requirements of the Class VI UIC program. That is why compliance with the final permit "constitutes compliance with Part C of the SDWA". This provision in Condition A provides a "permit shield" to protect the permittee against claims that the permit is not strict enough as issued.

Response

As a general matter, the UIC permit is intended as a roadmap to identify the relevant requirements and obligations of ADM. The relevant regulatory provisions are lengthy and technical, and the permit language may summarize those requirements and provide reference to the regulatory details rather than copying them in their entirety. This makes the permit more reader-friendly and easy to follow. Incorporating the additional details by reference does not create any conflict or confusion between the terms of the permit and the regulations.

The language in 40 Code of Federal Regulations (C.F.R.) §144.35 merely limits the compliance obligations of a permittee to the permit itself, but it does not in any way limit the actual permit terms. There is nothing in the language in 40 C.F.R. §144.35 that precludes the Agency from noting the relevant regulatory provisions in the permit as part of compliance for any permit holder. This makes sense in the context of Class VI permits in particular, because Class VI permits are issued for the life of a facility. As such, EPA anticipates periodic reevaluation to occur during the lifetime of the Geologic Sequestration (GS) project, and reference to the relevant regulatory provisions provides clarity on the standards against which any revisions will be judged.

Through issuance of a final permit, EPA approves the plans as contained in the permit. However, EPA recognizes that site specific conditions encountered during the project may require alteration of the project plans. If such a situation arises, ADM may propose changes to any plan to the Director. Any such changes, as the commenter notes in his comment, would be addressed through permit modification, as specified in Section B of the permit and 40 C.F.R. Part 144. Any future regulatory changes that might affect the permit would also be addressed through permit modification. As a result, consistent with 40 C.F.R. §144.35, the permit continues to be the basis for the permittee's compliance with UIC requirements. In no way is EPA "subverting" the regulations or imposing a stricter regulatory requirement by referring to the regulations in the permit.

10. CSC

The problem identified with the potential conflict created by referencing both permit conditions and regulatory provisions is exacerbated by the frequent repetition of regulatory requirements throughout the draft permit. This is an unusual departure from past approaches in UIC permits. For example, Class IH permits issued by EPA Region 5 have included conditions for post-closure plans that say: "The permittee has submitted a plan for post-closure maintenance and monitoring, which is included in Part III(B) of this permit. This plan includes the information required by Section 146.72(a) and demonstrates how each of the applicable requirements of Section 146.72(a) will be met. The obligation to implement the post-closure plan survives the termination of this permit or the cessation of injection activities." This excellent language provides a very straightforward explanation of how the submitted plan, which has been reviewed and approved by EPA, provides for compliance with the regulatory requirements and becomes an enforceable part of the permit. A similar approach could easily be used for each of the required plans included in the Class VI permits and would provide a clearer understanding of how the plans function in providing for compliance with the regulatory requirements as part of the Class VI permit.

Response

EPA disagrees with the commenter's statement that the draft permit is "an unusual departure from past approaches in UIC permits." While the above language has appeared in Class I Hazardous injection well permits, the same permit section to which the commenter cites also contains language stating that "The permittee shall comply with the requirements for post-closure care and financial responsibility for post-

closure care found at 40 C.F.R. Sections 146.72 and 146.73." Additional language in the Class I Hazardous permit states that "The Post-Closure Care Period shall continue at least until all of the requirements of the approved post-closure plan and of 40 CFR Section 146.72 have been met." These permits indeed reference both permit conditions and regulatory provisions.

As a general matter, the UIC permit is intended as a roadmap to identify the relevant requirements and obligations of ADM. The relevant regulatory provisions are lengthy and technical, and the permit language may summarize those requirements and provide reference to the regulatory details rather than copying them in their entirety. This makes the permit more reader-friendly and easy to follow. Incorporating the additional details by reference does not create any conflict or confusion between the terms of the permit and the regulations.

The language in 40 C.F.R. §144.35 merely limits the compliance obligations of a permittee to the permit itself, but it does not in any way limit the actual permit terms. There is nothing in the language in 40 C.F.R. §144.35 that precludes the Agency from noting the relevant regulatory provisions in the permit as part of compliance for any permit holder. This makes sense in the context of Class VI permits in particular, because Class VI permits are issued for the life of a facility. As such, EPA anticipates periodic reevaluation to occur during the lifetime of the GS project, and reference to the relevant regulatory provisions provides clarity on the standards against which any revisions will be judged.

Through issuance of a final permit, EPA approves the plans as contained in the permit. However, EPA recognizes that site specific conditions encountered during the project may require alteration of the project plans. If such a situation arises, ADM may propose changes to any plan to the Director. Any such changes, as the commenter notes in his comment, would be addressed through permit modification, as specified in Section B of the permit and 40 C.F.R. Part 144. Any future regulatory changes that might affect the permit would also be addressed through permit modification. As a result, consistent with 40 C.F.R. §144.35, the permit continues to be the basis for the permittee's compliance with UIC requirements. In no way is EPA "subverting" the regulations or imposing a stricter regulatory requirement by referring to the regulations in the permit.

11. ADM

Provision: AoR B-5 Table 1

Text of Draft Permit: Table 1. Model domain information.

Proposed Revision: Table was not accurately converted in PDF. Insert lines across all columns in the table.

Comment: Table 1 needs lines across all columns to accurately show monitoring requirements.

12. ADM

Provision: PISC E-5 Table 1

Text of Draft Permit: Table 1. Post-injection phase direct ground water monitoring above confining zone.(1,2)

Proposed Revision: Table was not accurately converted in PDF. Insert lines across all columns in the table.

Comment: Table 1 needs lines across all columns to accurately show monitoring requirements.

13. ADM

Provision: PISC E-6 Table 2

Text of Draft Permit: Table 2. Post-injection phase indirect ground water monitoring above the confining zone.(1)

Proposed Revision: Table was not accurately converted in PDF. Insert lines across all columns in the table.

Comment: Table 2 needs lines across all columns to accurately show monitoring requirements.

14. ADM

Provision: PISC E-7,8 Table 3

Text of Draft Permit: Table 3. Summary of analytical and field parameters for ground water samples.

Proposed Revision: Table was not accurately converted in PDF. Insert lines across all columns in the table.

Comment: Table 3 needs lines across all columns to accurately show monitoring requirements.

15. ADM

Provision: PISC E-14 Table 6

Text of Draft Permit: Table 6. Post-injection phase plume monitoring.(1)

Proposed Revision: Table was not accurately converted in PDF. Insert lines across all columns in the table.

Comment: Table 6 needs lines across all columns to accurately show monitoring requirements.

16. ADM

Provision: PISC E-15 Table 8

Text of Draft Permit: Table 8. Summary of analytical and field parameters for fluid sampling in the Mt. Simon.

Proposed Revision: Table was not accurately converted in PDF. Insert lines across all columns in the table.

Comment: Table 8 needs lines across all columns to accurately show monitoring requirements.

17. ADM

Provision: PISC E-16 Table 9

Text of Draft Permit: Table 9. Post-injection phase pressure-front monitoring and other monitoring.(1,2)

Proposed Revision: Table was not accurately converted in PDF. Insert lines across all columns in the table.

Comment: Table 9 needs lines across all columns to accurately show monitoring requirements.

18. ADM

Provision: PISC E-22 Table 10

Text of Draft Permit: Table 10. Fluid parameters for the Pennsylvanian, Ironton-Galesville, and Mt. Simon.

Proposed Revision: Table was not accurately converted in PDF. Insert lines across all columns in the table.

Comment: Table 10 needs lines across all columns to accurately show monitoring requirements.

Response (to comments 11-18)

EPA diagnosed the issue identified in these comments as a technical problem expressed only when the PDF (portable document format) posted on EPA's webpage is displayed on a computer screen. The root file, copies printed from the PDF file, the draft permits provided to ADM and the Decatur Library (the public repository), and the official permit file are all unaffected. Software engineers do not have a known solution at this time, but there is a workaround. EPA suggests that users modify their PDF Reader settings to not enhance thin lines for their page display settings if they experience this issue. EPA has also modified the formatting of these tables in the final permit to help ensure the PDF files on our website display appropriately.

19. U.S. Fish and Wildlife Service

The Service doesn't have specific comments on the project based on review of the fact sheet and given that this is a permit for an existing well that has been in operation since 2011.

Response

This comment did not request, and does not require, a change to the draft permit.

SECTION 2. AREA OF REVIEW (AOR) AND CORRECTIVE ACTION COMMENTS

1. ADM

Provision: G(1)

Text of Draft Permit: The permittee shall maintain and comply with the approved Area of Review and Corrective Action Plan (Attachment B of this permit) which is an enforceable condition of this permit and shall meet the requirements of 40 CFR 146.84.

References: **§ 144.35 Effect of a permit.** (a) Except for Class II and III wells, compliance with a permit during its term constitutes compliance, for purposes of enforcement, with Part C of the SDWA. However, a permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in §§ 144.39 and 144.40.

§ 144.39 Modification or revocation and reissuance of permits. (a)(2) Information. The Director has received information. Permits other than for Class II and III wells may be modified during their terms for this cause only if the information was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance.

§ 144.41 Minor modifications of permits. Upon the consent of the permittee, the Director may modify a permit to make the corrections or allowances for changes in the permitted activity listed in this section, without following the procedures of part 124. Any permit modification not processed as a minor modification under this section must be made for cause and with part 124 draft permit and public notice as required in § 144.39.

Proposed Revision: The permittee shall maintain and comply with the approved Area of Review and Corrective Action Plan (Attachment B of this permit) which is an enforceable condition of this permit. This plan includes the information required by Section 146.84 and demonstrates how each of the applicable requirements of Section 146.84 will be met.

Comment: Pursuant to 40 CFR §144.35(a), complying with the terms of the final permit and the approved Area of Review and Corrective Action Plan "constitutes compliance" with the requirements of 40 CFR §146.84. This permit shield provision in 40 CFR §144.35(a) precludes the imposition of an additional obligation to comply with some other interpretation of the requirements of 40 CFR §146.84. By issuing this permit, EPA has determined that compliance with the Area of Review and Corrective Action Plan during the term of the permit constitutes compliance with 40 CFR §146.84.

The qualification for a permit shield is a fundamental protection that has been consistently recognized by the EPA Environmental Appeals Board (EAB) and numerous federal courts. As noted by the United States Supreme Court, the purpose of a permit shield is "to insulate permit holders from changes in various regulations during the period of a permit and to relieve them of having to litigate in an enforcement action the question whether their permits are sufficiently strict." *E. I. du Pont de Nemours & Co. v. Train*, 430 U.S. 112, 138 n.28 (1977). That is, this provision "serves the purpose of giving permits finality." *Id.*

Essentially, the courts have confirmed that compliance with the terms of a permit entitles the permittee to be shielded from SDWA UIC program liability imposed by some separate reading of the regulatory requirements. *Wisconsin Resources Protection Council v. Flambeau Min. Co.*, 727 F.3d 700 (7th Cir. 2013); *Piney Run Pres. Ass'n v. Cnty. Commis.*, 268 F.3d 255, 266 (4th Cir. 2001); *Coon v. Willet Dairy, LP*, 536 F.3d 171, 173 (2d Cir. 2008); In re Ketchikan Pulp Co., 7 E.A.D. 605 (EPA 1998). Limitations on the permit shield have been recognized only when the permit applicant has not satisfied reporting and disclosure requirements of the application process or when the activity under consideration was not "reasonably anticipated by, or within the reasonable contemplation of, the permitting authority" based on the information submitted in the permit application. *Piney Run*

at 268.

Given the established basis for the permit shield provided by 40 CFR §144.35(a), EPA's repeated assertion in its Response to Comments on the ADM Class VI permit for the CCS#2 well that "ADM must comply with both its permit and the regulations" is both unsupported and unsupportable. See U. S. EPA Region 5, Response to Comments for Draft Class VI Permit Issued to Archer Daniels Midland (ADM) at 8, 16, 17, 18, 19, 21, 26, 27, 28, 51, 52, 54, 55, 57, 58, 61, 62, 64, 65, 66, 76, and 77 (2014) ["CCS#2 Response to Comments"], incorporated herein by reference. That assertion would completely undercut the permit shield provided by section 144.35(a).

Unfortunately, this condition of the draft permit contains language that denies the permit finality and could subject the permittee to questions about whether the permit is sufficiently strict. The wording of this provision is contrary to 40 CFR §144.35 and, therefore, the imposition of such a condition would constitute a conclusion of law that is clearly erroneous.

As indicated by the second sentence of 40 CFR §144.35(a), EPA cannot simply seek to impose a stricter requirement by asserting the regulatory provision pursuant to which the permit condition is approved. Instead, EPA must follow the procedures of 40 CFR §§144.39 and 144.40 to impose a stricter requirement. EPA cannot subvert the permit shield provision of 40 CFR §144.35 by simply imposing in permit conditions a separate requirement to also comply with the regulatory provision that the condition is designed to meet.

In its response to a similar comment on this provision as included in the Class VI permit for ADM well CCS#2, EPA stated: "As a general matter the UIC permit is intended as a roadmap to identify the relevant requirements and obligations of ADM." CCS#2 Response to Comments at 16

EPA provides no authority for the assertion that a permit is "intended as a roadmap." Under 40 CFR §144.3, "Permit means an authorization, license, or equivalent control document issued by EPA or an approved State to implement the requirements of this part, parts 145, 146 and 124." (See also 40 CFR §146.3.) A permit is not a "roadmap"; it is a control document. The purpose of the conditions included in a permit is "[t]o assure compliance with all applicable requirements of SDWA and the UIC regulations." EPA, Drinking Water Academy, Introduction to UIC Permitting, slide 227 (2002). The fact sheet issued by EPA Region 5 with the draft Class VI permit does not suggest that it is proposing to issue a "roadmap." Instead, the fact sheet states: "Title 40 of the Code of Federal Regulations Parts 144 and 146, require U.S. EPA permits, known as Class VI permits, for carbon storage to specify conditions for the construction, operation, monitoring, reporting, plugging, post-injection site care and site closure of Class VI injection wells to prevent the movement of fluids into any underground source of drinking water, or USDW." This confirms that the permit is intended to be a "control document" rather than a roadmap to compliance with the various regulatory requirements.

EPA next asserted in the CCS#2 Response to Comments that "40 C.F.R. §146.84(b) makes it clear that ADM must comply with both the permit requirement and the regulatory requirement upon which it is based." CCS#2 Response to Comments at 16. But EPA does not indicate what specific wording in section 146.84(b) supports this conclusion. The requirement is to "prepare, maintain, and comply with a plan to delineate the area of review for a proposed geologic sequestration project, periodically reevaluate the delineation, and perform corrective action that meets the requirements of this section and is acceptable to the Director." 40 CFR §146.84(b). The fact that, by its terms, "[t]he requirement to maintain and implement an approved plan is directly enforceable regardless of whether the requirement is a condition of the permit" does not change the nature of the permit shield. Once the permittee has prepared and obtained approval of the plan, the shield becomes effective, and compliance with the approved plan and other permit conditions will constitute compliance with the requirements of 40 CFR §146.84(b). This might be different if the direct enforceability language also applied to delineating the area of review and performing corrective

action, but it does not. The direct enforceability language applies only to the requirement to maintain and implement the required plan. Accordingly, the purported requirement to comply with both the permit and the regulation is absent.

In its CCS#2 Response to Comments, EPA next stated that it "anticipates that the AoR must be reevaluated periodically during the lifetime of the GS project [40 §146.84(b) and (e) and Section G of the permit]. Reference to the relevant regulatory provisions provides clarity on the standards against which any revisions will be judged." This statement is unsupportable, however, because 40 CFR §146.84(b)(2) expressly provides that the plan itself is to set forth:

(i) The minimum fixed frequency, not to exceed five years, at which the owner or operator proposes to reevaluate the area of review;

(ii) The monitoring and operational conditions that would warrant a reevaluation of the area of review prior to the next scheduled reevaluation as determined by the minimum fixed frequency established in paragraph (b)(2)(i) of this section.

(iii) How monitoring and operational data (e.g., injection rate and pressure) will be used to inform an area of review reevaluation; . . . .."

It is therefore clear that the plan establishes the standards and process for conducting the periodic reevaluations. To the extent that such reevaluations lead to a need for modifications to the plan or permit conditions, that is an activity that occurs outside of the permit shield and will be required to follow the applicable procedures for permit modification. But there is no need to reference 40 CFR § 146.84 in this permit condition in such a manner as to suggest that the permit shield does not apply. The process for permit modification is already spelled out in Permit Condition B. The same is true of the final paragraph of EPA's response, which references the potential "need to alter the AoR and Corrective Action Plan." CCS#2 Response to Comments at 16. Any such need will also engage the permit modification process of Condition B.

2. CSC

Provision: G(1)

Text of Draft Permit: The permittee shall maintain and comply with the approved Area of Review and Corrective Action Plan (Attachment B of this permit) which is an enforceable condition of this permit and shall meet the requirements of 40 CFR 146.84.

References: **§ 144.35 Effect of a permit.** (a) Except for Class II and III wells, compliance with a permit during its term constitutes compliance, for purposes of enforcement, with Part C of the SDWA. However, a permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in §§ 144.39 and 144.40.

§ 144.39 Modification or revocation and reisssuance of permits. (a)(2) Information. The Director has received information. Permits other than for Class II and III wells may be modified during their terms for this cause only if the information was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance.

§ 144.41 Minor modifications of permits. Upon the consent of the permittee, the Director may modify a permit to make the corrections or allowances for changes in the permitted activity listed in this section, without following the procedures of part 124. Any permit modification not processed as a minor modification under this section must be made for cause and with part 124 draft permit and public notice as required in § 144.39.

Proposed Revision: The permittee shall maintain and comply with the approved Area of Review and Corrective Action Plan (Attachment B of this permit) which is an enforceable condition of this permit. This plan includes the information required by Section 146.84 and demonstrates how each of the applicable requirements of Section 146.84 will be met.

Comment: Pursuant to 40 CFR 144.35(a), complying with the terms of the final permit and the approved Area of Review and Corrective Action Plan "constitutes compliance" with the requirements of 40 CFR 146.84. The permit shield provision in 40 CFR 144.35(a) precludes the imposition of an additional obligation to comply with some other interpretation of the requirements of section 146.84. By issuing this permit, EPA has determined that compliance with the Area of Review and Corrective Action Plan during the term of the permit constitutes compliance with section 146.84.

This recommendation and comment were submitted on the draft permit for the CCS#2 well to which EPA responded without providing a true justification for failing to make the change.

EPA's response stated: "As a general matter the UIC permit is intended as a roadmap to identify the relevant requirements and obligations of ADM." Response to Comments at 19. Yet, EPA provides no authority for the assertion that a permit is "intended as a roadmap."

Additional support for this comment is provided in the accompanying comment letter at pages 2-6, and that discussion is incorporated herein by reference.

Pursuant to 40 CFR §144.35(a), complying with the terms of the final permit and the approved Area of Review and Corrective Action Plan "constitutes compliance" with the requirements of 40 CFR §146.84. This permit shield provision in 40 CFR §144.35(a) precludes the imposition of an additional obligation to comply with some other interpretation of the requirements of section 146.84. By issuing this permit, EPA has determined that compliance with a particular plan or condition incorporated in the UIC Class VI permit during the term of the permit constitutes compliance with applicable regulatory requirement.

Qualification for a permit shield is a fundamental protection that has been consistently recognized by the United States Supreme Court, the EPA Environmental Appeals Board (EAB) and numerous federal courts. As noted by the United States Supreme Court, the purpose of a permit shield is "to insulate permit holders from changes in various regulations during the period of a permit and to relieve them of having to litigate in an enforcement action the question whether their permits are sufficiently strict." *E. I. du Pont de Nemours & Co. v. Train*, 430 U.S. 112, 138 n. 28 (1977). That is, this provision "serves the purpose of giving permits finality." *Id.*

Essentially, the courts have confirmed that compliance with the terms of a permit entitles the permittee to be shielded from SDWA UIC program liability imposed by some separate reading of the regulatory requirements. *Wisconsin Resources Protection Council v. Flambeau Min. Co.*, 727 F.3d 700 (7th Cir. 2013); *Piney Run Pres. Ass'n v. Cnty. Commis.*,268 F.3d 255, 266 (4th Cir. 2001); *Coon v. Willet Dairy, LP*, 536 F.3d 171, 173 (2d Cir. 2008); *In re Ketchikan Pulp Co.*, 7 E.A.D. 605 (EPA 1998). Limitations on the permit shield have been recognized only when the permit applicant has not satisfied reporting and disclosure requirements of the application process or when the activity under consideration was not "reasonably anticipated by, or within the reasonable contemplation of, the permitting authority" based on the information submitted in the permit application. *Piney Run* at 268.

Given the established basis for the permit shield provided by section 144.35(a), EPA's repeated assertion in its Response to Comments on the ADM Class VI permit for the CCS#2 well that "ADM must comply with both its permit and the regulations" is both unsupported and unsupportable. U. S. EPA Region 5, Response to Comments for Draft Class VI Permit Issued to Archer Daniels Midland (ADM) at 8, 16, 17, 18, 19, 21, 26, 27, 28, 51, 52, 54, 55, 57, 58, 61, 62, 64, 65, 66, 76, and 77 (2014) (Attachment A) ["Response to Comments"]. That assertion would completely undercut the permit shield provided by section 144.35(a).

Unfortunately, a number of the subsequent conditions of the draft permit contain language that would deny the permit its intended finality and would subject the permittee to questions about whether the permit is sufficiently strict. As will be noted here and in our detailed comments, the

wording of these provisions is contrary to section 144.35 and, therefore, the imposition of such a condition would constitute a conclusion of law that is clearly erroneous.

As indicated by the second sentence of section 144.35(a), EPA cannot simply seek to impose a stricter requirement by asserting the regulatory provision pursuant to which the permit condition is approved. Instead, EPA must follow the procedures of sections 144.39 and 144.40 to impose a stricter requirement. EPA cannot subvert the permit shield provision of section 144.35 by simply imposing in permit conditions a separate requirement to also comply with the regulatory provision that the condition or plan is designed and approved to meet. Permits are not intended to be open-ended; they are intended to have finality.

Unfortunately, a number of conditions in the draft permit that also reference regulatory provisions give the inappropriate impression that the permittee must take some further steps—beyond complying with the permit and the approved incorporated plans—to meet the regulatory requirements. For example, Section G(1) of the draft permits states: "The permittee shall maintain and comply with the approved Area of Review and Corrective Action Plan (Attachment B of this permit) which is an enforceable condition of this permit **and shall meet the requirements of 40 CFR 146.84**." This wording is inappropriate because maintaining and complying with "the approved Area of Review and Corrective Action Plan (Attachment B of this permit) which is an enforceable condition of this permit" will be entirely sufficient to meet the requirements of 40 CFR §146.84. EPA makes that determination when it issues the permit and approves the plan as part of that permit. No further action is necessary; therefore the inclusion of the words "and shall meet the requirements of 40 CFR §146.84" is both unnecessary and inappropriately confusing. It would be acceptable to use wording similar to that in Section M(5) and say "to meet" rather than "and shall meet", but given the reference to the plan being an enforceable condition of the permit, that is unnecessary and may potentially be confusing. There are a number of other places in the draft permits where loose—and potentially contradictory language (that is, language that would contradict section A)—is used. The attached detailed comments identify these provisions and provide specific recommendations of alternative language to correct the deficiencies.

In its response to a similar comment on this provision as included in the Class VI permit for ADM well CCS#2, EPA stated: "As a general matter the UIC permit is intended as a roadmap to identify the relevant requirements and obligations of ADM." Response to Comments at 16. EPA provides no authority for the assertion that a permit is "intended as a roadmap." Under 40 CFR section 144.3, "Permit means an authorization, license, or equivalent control document issued by EPA or an approved State to implement the requirements of this part, parts 145, 146 and 124." (See also 40 CFR 146.3.) A permit is not a "roadmap"; it is a control document. The purpose for including conditions in a permit is "[t]o assure compliance with all applicable requirements of SDWA and the UIC regulations." EPA, Drinking Water Academy, Introduction to UIC Permitting, slide 227 (2002). The fact sheet issued by EPA Region 5 with the draft Class VI permit for well CCS#1 does not suggest that it is proposing to issue a "roadmap." Instead, the fact sheet states: "Title 40 of the Code of Federal Regulations Parts 144 and 146, require U.S. EPA permits, known as Class VI permits, for carbon storage to specify conditions for the construction, operation, monitoring, reporting, plugging, post-injection site care and site closure of Class VI injection wells to prevent the movement of fluids into any underground source of drinking water, or USDW." This language confirms that the permit is intended to be a "control document" rather than a roadmap to compliance with the various regulatory requirements.

In the Response to Comments, EPA also asserts that various regulatory requirements make it clear that ADM must comply with both the permit requirement and the regulatory requirement upon which it is based." *See, e.g.,* Response to Comments at 16 (referencing 40 CFR §146.84(b)). But EPA does not indicate what specific wording in section 146.84(b) supports this conclusion. The

requirement is to "prepare, maintain, and comply with a plan to delineate the area of review for a proposed geologic sequestration project, periodically reevaluate the delineation, and perform corrective action that meets the requirements of this section and is acceptable to the Director." 40 CFR §146.84(b). The fact that, by its terms, "[t]he requirement to maintain and implement an approved plan is directly enforceable regardless of whether the requirement is a condition of the permit" does not change the nature of the permit shield. Once the permittee has prepared and obtained approval of the plan, the shield becomes effective, and compliance with the approved plan and other permit conditions will constitute compliance with the requirements of section 146.84(b). This might be different if the direct enforceability language also applied to delineating the area of review and performing corrective action, but it does not. The direct enforceability language applies only to the requirement to maintain and implement the required plan. Accordingly, the claimed explicit requirement to comply with both the permit and the regulation is absent.

In its Response to Comments, EPA also states that it "anticipates that the AoR must be reevaluated periodically during the lifetime of the GS project [40 CFR §146.84(b) and (e) and Section G of the permit]. Reference to the relevant regulatory provisions provides clarity on the standards against which any revisions will be judged." This statement is unsupportable, however, because section 146.84(b)(2) expressly provides that the plan itself is to set forth:

(i) The minimum fixed frequency, not to exceed five years, at which the owner or operator proposes to reevaluate the area of review;

(ii) The monitoring and operational conditions that would warrant a reevaluation of the area of review prior to the next scheduled reevaluation as determined by the minimum fixed frequency established in paragraph (b)(2)(i) of this section.

(iii) How monitoring and operational data (e.g., injection rate and pressure) will be used to inform an area of review reevaluation; . . . ."

It is therefore clear that the plan establishes the standards and process for conducting the periodic reevaluations. To the extent that such reevaluations lead to a need for modifications to the plan or permit conditions, that is an activity that occurs outside of the permit shield and will be required to follow applicable procedures for permit modification. There is no need to reference the regulation in the permit condition in such a manner as to suggest that the permit shield does not apply. The process for permit modification is already spelled out in Permit Condition B. The same is true of the final paragraph of EPA's response, which references the potential "need to alter the AoR and Corrective Action Plan." Response to Comments at 16. Any such need for permit revision will also engage the permit modification process of Condition B.

Response (to comments 1 and 2)

As a general matter, the UIC permit is intended as a roadmap to identify the relevant requirements and obligations of ADM. The relevant regulatory provisions are lengthy and technical, and the permit language may summarize those requirements and provide reference to the regulatory details rather than copying them in their entirety. This makes the permit more reader-friendly and easy to follow. Incorporating the additional details by reference does not create any conflict or confusion between the terms of the permit and the regulations.

The language in 40 C.F.R. §144.35 merely limits the compliance obligations of a permittee to the permit itself, but it does not in any way limit the actual permit terms. There is nothing in the language in 40 C.F.R. §144.35 that precludes the Agency from noting the relevant regulatory provisions in the permit as part of compliance for any permit holder. This makes sense in the context of Class VI permits in particular, because Class VI permits are issued for the life of a facility. As such, EPA anticipates periodic

reevaluation to occur during the lifetime of the GS project, and reference to the relevant regulatory provisions provides clarity on the standards against which any revisions will be judged.

Through issuance of a final permit, EPA approves the plans as contained in the permit. However, EPA recognizes that site specific conditions encountered during the project may require alteration of the project plans. If such a situation arises, ADM may propose changes to any plan to the Director. Any such changes, as the commenters note, would be addressed through permit modification, as specified in Section B of the permit and 40 C.F.R. Part 144. Any future regulatory changes that might affect the permit would also be addressed through permit modification. As a result, consistent with 40 C.F.R. §144.35, the permit continues to be the basis for the permittee's compliance with UIC requirements. In no way is EPA "subverting" the regulations or imposing a stricter regulatory requirement by referring to the regulations in the permit.

Therefore, EPA has not modified the permit language based upon this comment.

3. ADM

Provision: G(2)

Text of Draft Permit: At the fixed frequency specified in the Area of Review and Corrective Action Plan, or more frequently when monitoring and operational conditions warrant, the permittee must reevaluate the area of review and perform corrective action in the manner specified in 40 CFR 146.84 and update the Area of Review and Corrective Action Plan or demonstrate to the Director that no update is needed.

References: **§146.84 Area of review and corrective action.**

(b) The owner or operator of a Class VI well must prepare, maintain, and comply with a plan to delineate the area of review for a proposed geologic sequestration project, periodically reevaluate the delineation, and perform corrective action that meets the requirements of this section and is acceptable to the Director. The requirement to maintain and implement an approved plan is directly enforceable regardless of whether the requirement is a condition of the permit. As a part of the permit application for approval by the Director, the owner or operator must submit an area of review and corrective action plan that includes the following information:

* * * *

(2) A description of:

(i) The minimum fixed frequency, not to exceed five years, at which the owner or operator proposes to reevaluate the area of review;

(ii) The monitoring and operational conditions that would warrant a reevaluation of the area of review prior to the next scheduled reevaluation as determined by the minimum fixed frequency established in paragraph (b)(2)(i) of this section.

Proposed Revision: 2. At the fixed frequency specified in the approved Area of Review and Corrective Action Plan (Attachment B of this permit), or more frequently when monitoring and operational conditions warrant as described in that plan, the permittee must reevaluate the area of review and perform corrective action in the manner specified in 40 CFR 146.84 and update the Area of Review and Corrective Action Plan or demonstrate to the Director that no update is needed.

Comment: The plan itself is intended to spell out the frequency of review and the conditions that will trigger an earlier review. It is better to specify the fixed frequency or to use the same formula of "approved Area of Review and Corrective Action Plan (Attachment B of this permit)".

This recommendation and comment were submitted on the draft permit for the CCS#2 well to which EPA responded without providing a true justification for failing to make the change.

EPA's response stated: "As a general matter the UIC permit is intended as a roadmap to identify the relevant requirements and obligations of ADM." CCS#2 Response to Comments at 18.

Pursuant to 40 CFR §144.35(a), complying with the terms of the final permit and the approved Area of Review and Corrective Action Plan "constitutes compliance" with the requirements of 40 CFR §146.84. This permit shield provision in 40 CFR §144.35(a) precludes the imposition of an additional obligation to comply with some other interpretation of the requirements of 40 CFR §146.84. By issuing this permit, EPA has determined that compliance with the Area of Review and Corrective Action Plan during the term of the permit constitutes compliance with 40 CFR §146.84.

Additional support for this comment is provided in the comments on Conditions A and G(1), which are incorporated herein by reference.

4. CSC

Provision: G(2)

Text of Draft Permit: 2. At the fixed frequency specified in the Area of Review and Corrective Action Plan, or more frequently when monitoring and operational conditions warrant, the permittee must reevaluate the area of review and perform corrective action in the manner specified in 40 CFR 146.84 and update the Area of Review and Corrective Action Plan or demonstrate to the Director that no update is needed.

References: 146.84(b) The owner or operator of a Class VI well must prepare, maintain, and comply with a plan to delineate the area of review for a proposed geologic sequestration project, periodically reevaluate the delineation, and perform corrective action that meets the requirements of this section and is acceptable to the Director. The requirement to maintain and implement an approved plan is directly enforceable regardless of whether the requirement is a condition of the permit. As a part of the permit application for approval by the Director, the owner or operator must submit an area of review and corrective action plan that includes the following information:

* * * *

(2) A description of:

(i) The minimum fixed frequency, not to exceed five years, at which the owneror operator proposes to reevaluate the area of review;

(ii) The monitoring and operational conditions that would warrant a reevaluation of the area of review prior to the next scheduled reevaluation as determined by the minimum fixed frequency established in paragraph (b)(2)(i) of this section.

Proposed Revision: 2. At the fixed frequency specified in the approved Area of Review and Corrective Action Plan (Attachment B of this permit), or more frequently when monitoring and operational conditions warrant as described in that plan, the permittee must reevaluate the area of review and perform corrective action in the manner specified in 40 CFR 146.84 and update the Area of Review and Corrective Action Plan or demonstrate to the Director that no update is needed.

Comment: The plan itself is intended to spell out the frequency of review and the conditions that will trigger an earlier review. It is better to specify the fixed frequency or to use the same formula of "approved Area of Review and Corrective Action Plan (Attachment B of this permit)".

This recommendation and comment were submitted on the draft permit for the CCS#2 well to which EPA responded without providing a true justification for failing to make the change.

EPA's response stated: "As a general matter the UIC permit is intended as a roadmap to identify the relevant requirements and obligations of ADM." Response to Comments at 19.

EPA provides no authority for the assertion that a permit is "intended as a roadmap." Under section 144.3, "Permit means an authorization, license, or equivalent control document issued by EPA or an approved State to implement the requirements of this part, parts 145, 146 and 124." (See also 40 CFR 146.3.) A permit is not a "roadmap"; it is a control document. The purpose of the conditions

included in a permit is "[t]o assure compliance with all applicable requirements of SDWA and the UIC regulations." EPA, Drinking Water Academy, Introduction to UIC Permitting, slide 227 (2002). The fact sheet issued by EPA Region 5 with the draft Class VI permit does not suggest that it is proposing to issue a "roadmap." Instead, the fact sheet states: "Title 40 of the Code of Federal Regulations Parts 144 and 146, require U.S. EPA permits, known as Class VI permits, for carbon storage to specify conditions for the construction, operation, monitoring, reporting, plugging, post-injection site care and site closure of Class VI injection wells to prevent the movement of fluids into any underground source of drinking water, or USDW." This confirms that the permit is intended to be a "control document" rather than a roadmap to compliance with the various regulatory requirements.

EPA next asserted that "40 C.F.R. §146.84(b) makes it clear that ADM must comply with both the permit requirement and the regulatory requirement upon which it is based." Response to Comments at 19. But EPA does not indicate what specific wording in section 146.84(b) supports this conclusion. The requirement is to "prepare, maintain, and comply with a plan to delineate the area of review for a proposed geologic sequestration project, periodically reevaluate the delineation, and perform corrective action that meets the requirements of this section and is acceptable to the Director." 40 CFR §146.84(b). The fact that this requirement, by its terms, "[t]he requirement to maintain and implement an approved plan is directly enforceable regardless of whether the requirement is a condition of the permit" does not change the nature of the permit shield. Once the permittee has prepared and obtained approval of the plan, the shield becomes effective, and compliance with the approved plan and other permit conditions will constitute compliance with the requirements of 146.84(b). This would be different if the direct enforceability language also applied to delineating the area of review and performing corrective action, but it does not. The direct enforceability language applies only to the requirement to maintain and implement the required plan. Accordingly, the claimed requirement to comply with both the permit and the regulation is absent.

Additional support for this comment is provided in the accompanying comment letter at pages 2-6, and that discussion is incorporated herein by reference.

Response (to comments 3 and 4)

As a general matter, the UIC permit is intended as a roadmap to identify the relevant requirements and obligations of ADM. The relevant regulatory provisions are lengthy and technical, and the permit language may summarize those requirements and provide reference to the regulatory details rather than copying them in their entirety. This makes the permit more reader-friendly and easy to follow. Incorporating the additional details by reference does not create any conflict or confusion between the terms of the permit and the regulations.

The language in 40 C.F.R. §144.35 merely limits the compliance obligations of a permittee to the permit itself, but it does not in any way limit the actual permit terms. There is nothing in the language in 40 C.F.R. §144.35 that precludes the Agency from noting the relevant regulatory provisions in the permit as part of compliance for any permit holder. This makes sense in the context of Class VI permits in particular, because Class VI permits are issued for the life of a facility. As such, EPA anticipates periodic reevaluation to occur during the lifetime of the GS project, and reference to the relevant regulatory provisions provides clarity on the standards against which any revisions will be judged.

Through issuance of a final permit, EPA approves the plans as contained in the permit. However, EPA recognizes that site specific conditions encountered during the project may require alteration of the project plans. If such a situation arises, ADM may propose changes to any plan to the Director. Any

such changes, as the commenters note, would be addressed through permit modification, as specified in Section B of the permit and 40 C.F.R. Part 144. Any future regulatory changes that might affect the permit would also be addressed through permit modification. As a result, consistent with 40 C.F.R. §144.35, the permit continues to be the basis for the permittee's compliance with UIC requirements. In no way is EPA "subverting" the regulations or imposing a stricter regulatory requirement by referring to the regulations in the permit.

To conform with other sections of the permit, Section G(2) of the final permit has been changed to read: "At the fixed frequency specified in the approved Area of Review and Corrective Action Plan (Attachment B of this permit), or more frequently when monitoring and operational conditions warrant, the permittee must reevaluate the area of review and perform corrective action in the manner specified in 40 CFR 146.84 and update the Area of Review and Corrective Action Plan or demonstrate to the Director that no update is needed."

5. ADM

Provision: G(3)

Text of Draft Permit: Following each AoR reevaluation or a demonstration that no evaluation is needed, the permittee shall submit the resultant information in an electronic format to the Director for review and approval of the AoR results.

References: **146.84 Area of review and corrective action.**

(e)(4) Submit an amended area of review and corrective action plan or demonstrate to the Director through monitoring data and modeling results that no amendment to the area of review and corrective action plan is needed. Any amendments to the area of review and corrective action plan must be approved by the Director, must be incorporated into the permit, and are subject to the permit modification requirements at §§ 144.39 or 144.41 of this chapter, as appropriate.

Proposed Revision: G.3. Following each AoR reevaluation ~~or a demonstration that no evaluation is needed~~, the permittee shall submit either the ~~resultant information~~ updated area of review and corrective action plan in an electronic format to the Director for review and approval of the AoR results, or a demonstration that no update is needed.

Comment: The language in the draft permit is awkwardly worded and the reference to "resultant information" is potentially open-ended. The regulation requires the permittee to submit either an amended plan or a demonstration that amendment is unnecessary.

This same recommended revision and accompanying comment were provided on the draft CCS#2 well permit, and EPA repeated portions of its response to the two previous comments. As noted in the two comments above (which are incorporated herein by reference), EPA's explanation as to why a permittee must "comply with both the permit requirement and the regulatory requirement" is unsupportable.

More importantly, EPA's response does not actually address the recommended revision and the supporting comment for this specific permit condition. The recommended revision is intended to track the regulatory requirement more precisely than does the draft permit. Resultant information will be available only when a reevaluation is conducted. A demonstration that no amendment is needed likely will draw upon data and modeling from a number of sources including the ongoing testing and monitoring program. Thus, the pertinent information will not be "resultant" from a reevaluation. The suggested revision is not designed to change any substantive requirement; it is only designed to use language that more clearly reflects the alternative courses that could be pursued.

We encourage EPA to make this revision. If the Agency chooses not to do so, we request a response

to the comments that directly addresses the proposed revision and provides a relevant explanation as to why it is unacceptable.

6. CSC

Provision: G(3)

Text of Draft Permit: 3. Following each AoR reevaluation or a demonstration that no evaluation is needed, the permittee shall submit the resultant information in an electronic format to the Director for review and approval of the AoR results.

References: 146.84(e)(4) Submit an amended area of review and corrective action plan or demonstrate to the Director through monitoring data and modeling results that no amendment to the area of review and corrective action plan is needed. Any amendments to the area of review and corrective action plan must be approved by the Director, must be incorporated into the permit, and are subject to the permit modification requirements at §§ 144.39 or 144.41 of this chapter, as appropriate.

Proposed Revision: G.3. Following each AoR reevaluation ~~or a demonstration that no evaluation is needed~~, the permittee shall submit either the ~~resultant information~~ updated area of review and corrective action plan in an electronic format to the Director for review and approval of the AoR results, or a demonstration that no update is needed.

Comment: The language in the draft permit is awkwardly worded and the reference to "resultant information" is potentially open-ended. The regulation requires the permittee to submit either an amended plan or a demonstration that amendment is unnecessary.

This same recommended revision and accompanying comment were provided on the draft CCS#2 well permit, and EPA repeated portions of its response to the two previous comments. As noted in the two comments above(which are incorporated herein by reference), EPA's explanation as to why a permittee must "comply with both the permit requirement and the regulatory requirement" is unsupportable.

More importantly, EPA's response does not actually address the recommended revision and the supporting comment for this specific permit condition. The recommended revision is intended to track the regulatory requirement more precisely than does the draft permit. Resultant information will be available only when a reevaluation is conducted. A demonstration that no amendment is needed likely will draw upon data and modeling from a number of sources including the ongoing testing and monitoring program. Thus, the pertinent information will not be "resultant" from a reevaluation. The suggested revision is not designed to change any substantive requirement; it is only designed to use language that more clearly reflects the alternative courses that could be pursued.

We encourage EPA to make this revision. If the Agency chooses not to do so, we request a response to the comments that directly addresses the proposed revision and provides a relevant explanation as to why it is unacceptable.

Response (to comments 5 and 6)

EPA does not accept the proposed revision because the suggested language does not make it clear that a demonstration showing no update is needed must also be submitted to the Director for review and approval. However, following additional review of this provision, in order to provide more clarity EPA revised permit condition G(3) to read "Following each AoR reevaluation, the permittee shall submit the results of the reevaluation and an updated Area of Review and Corrective Action Plan or a demonstration that no update was needed in an electronic format to the Director for review and approval of the AoR results. Once approved by the Director, a revised Area of Review and Corrective Action Plan will become an enforceable condition of this permit."

SECTION 3. CONSTRUCTION AND PRE-INJECTION TESTING COMMENTS

1. ADM

Provision: I(2)

Text of Draft Permit: **Casing and Cementing** – The casing and cementing were engineered and constructed (approved under IEPA Permit No.: UIC-012-ADM) to meet the requirements at 40 CFR 146.86(a) and ensure protection of USDWs in lieu of requirements at 40 CFR 146.86(b). Casing and cement or other materials used in the construction of the well must have sufficient structural strength for the life of the geologic sequestration project. The casing and cement used in the construction of this well are shown in Attachment G of this permit and in the administrative record for this permit. Any change must be submitted in an electronic format for approval by the Director before installation.

References: **§ 146.86 Injection well construction requirements.**

(a) General. The owner or operator must ensure that all Class VI wells are constructed and completed to:

(1) Prevent the movement of fluids into or between USDWs or into any unauthorized zones;

(2) Permit the use of appropriate testing devices and workover tools; and

(3) Permit continuous monitoring of the annulus space between the injection tubing and long string casing.

Proposed Revision: 2. Casing and Cementing – The casing and cementing were engineered and constructed (approved under IEPA Permit No.: UIC-012-ADM) to meet the requirements at 40 CFR 146.86(a) and ensure protection of USDWs in lieu of requirements at 40 CFR 146.86(b). The casing and cement ~~or~~ and other materials used in the construction of the well ~~must~~ have sufficient structural strength for the life of the geologic sequestration project. The casing and cementing program ~~must~~ is designed to prevent the movement of fluids into or between USDWs for the expected life of the well in accordance with 40 CFR 146.86. The casing and cement used in the construction of this well are shown in Attachment G of this permit and in the administrative record for this permit. Any change must be submitted in an electronic format for approval by the Director before installation.

Comment: This well has already been constructed, as noted in the first sentence of this condition. Accordingly, the highlighted language should be deleted as unnecessary. It is just a recitation of what was done to design the construction program. Alternatively, the language should be revised as shown to reflect that it met the applicable standards.

As currently worded, this condition suggests that compliance requires something beyond having followed the approved construction plan. That is not the case. It was sufficient for the permittee to follow the construction plan submitted to Illinois EPA with the permit application and approved in the original Class I permit.

In its response to this comment on the draft permit for well CCS#2, EPA stated that "ADM must comply with both its permit and the applicable regulations." But EPA provides no authority to support this statement.

Pursuant to 40 CFR §144.35(a), complying with the terms of the final permit and the approved construction plan in the Class I permit "constitutes compliance" with the requirements of 40 CFR §146.86(a). The permit shield provision in 40 CFR §144.35(a) precludes the imposition of an additional obligation to comply with some other interpretation of the requirements of 40 CFR §146.86(a). By issuing this permit, EPA has determined that compliance with the construction plan constitutes compliance with 40 CFR §146.86(a).

Additional support for this comment is provided in the comments on Conditions A and G(1), which

are incorporated herein by reference.

2. CSC

Provision: I(2)

Text of Draft Permit: **2. Casing and Cementing** – The casing and cementing were engineered and constructed (approved under IEPA Permit No.: UIC-012- ADM) to meet the requirements at 40 CFR 146.86(a) and ensure protection of USDWs in lieu of requirements at 40 CFR 146.86(b). Casing and cement or other materials used in the construction of the well must have sufficient structural strength for the life of the geologic sequestration project. The casing and cement used in the construction of this well are shown in Attachment G of this permit and in the administrative record for this permit. Any change must be submitted in an electronic format for approval by the Director before installation.

References: **§ 146.86 Injection well construction requirements.**

(a) General. The owner or operator must ensure that all Class VI wells are constructed and completed to:

(1) Prevent the movement of fluids into or between USDWs or into any unauthorized zones;

(2) Permit the use of appropriate testing devices and workover tools; and

(3) Permit continuous monitoring of the annulus space between the injection tubing and long string casing.

Proposed Revision: 2. Casing and Cementing – The casing and cementing were engineered and constructed (approved under IEPA Permit No.: UIC-012- ADM) to meet the requirements at 40 CFR 146.86(a) and ensure protection of USDWs in lieu of requirements at 40 CFR 146.86(b). The casing and cement ~~or~~ and other materials used in the construction of the well ~~must~~ have sufficient structural strength for the life of the geologic sequestration project. The casing and cementing program ~~must~~ is designed to prevent the movement of fluids into or between USDWs for the expected life of the well in accordance with 40 CFR 146.86. The casing and cement used in the construction of this well are shown in Attachment G of this permit and in the administrative record for this permit. Any change must be submitted in an electronic format for approval by the Director before installation.

Comment: This well has already been constructed, as noted in the first sentence of this condition. Accordingly, the highlighted language should be deleted as unnecessary. It is just a recitation of what was done to design the construction program. Alternatively, the language should be revised as shown to reflect that it has already met the applicable standards.

As currently worded, this condition suggests that compliance requires something beyond having followed the approved construction plan. That is not the case. It was sufficient for the permittee to follow the construction plan submitted to Illinois EPA with the permit application and approved in the original Class I permit.

In its response to this comment on the draft permit for well CCS#2, EPA stated that "ADM must comply with both its permit and the applicable regulations." But EPA provides no authority to support this statement.

Pursuant to 40 CFR 144.35(a), complying with the terms of the final permit and the approved construction plan "constitutes compliance" with the requirements of 40 CFR 146.86(a). The permit shield provision in 40 CFR 144.35(a) precludes the imposition of an additional obligation to comply with some other interpretation of the requirements of 146.86(a). By issuing this permit, EPA has determined that compliance with the construction plan constitutes compliance with 146.86(a). Additional support for this comment is provided in the accompanying comment letter at pages 2-6, and that discussion is incorporated herein by reference.

Response (to comments 1 and 2)

The language in 40 C.F.R. §144.35 merely limits the compliance obligations of a permittee to the permit itself, but it does not in any way limit the actual permit terms. There is nothing in the language in 40 C.F.R. §144.35 that precludes the Agency from noting the relevant regulatory provisions in the permit as part of compliance for any permit holder. This makes sense in the context of Class VI permits in particular, because Class VI permits are issued for the life of a facility. By issuing a final permit with the same language used in the draft permit, EPA approves the casing and cementing plans submitted by ADM. However, EPA also recognizes that site specific conditions or new information may present the need to alter the casing and cementing plan. To the extent that new information indicates that the casing and/or cementing plans need to be revised, the permit language emphasizes the need to ensure compliance with 40 C.F.R. §146.86 and makes clear the standards against which any necessary revisions would be judged.

At that time, ADM may propose to the Director changes in the casing and cementing plan. Any such changes, as the commenters note, would be addressed through permit modification, as specified in Section B of the permit and 40 C.F.R. Part 144. Any future regulatory changes that might affect the permit would also be addressed through permit modification. As a result, consistent with 40 C.F.R. §144.35, the permit continues to be the basis for the permittee's compliance with UIC requirements. In no way is EPA "subverting" the regulations or imposing a stricter regulatory requirement by referring to the regulations in the permit.

Therefore, EPA did not make the suggested changes to the permit.

SECTION 4. TESTING, MONITORING, PLUGGING, AND POST-INJECTION SITE CARE COMMENTS

1. ADM

Provision: M(1)

Text of Draft Permit: The permittee shall maintain and comply with the testing and monitoring procedures described in the approved Post-Injection Site Care and Site Closure Plan (Attachment E of this permit) and with the requirements at 40 CFR 144.51(j), 146.88(e), 146.90 and 146.93(b). The Post-Injection Site Care and Site Closure Plan is an enforceable condition of this permit. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Procedures for all testing and monitoring under this permit must be submitted to the Director in an electronic format for approval at least 30 days prior to the test. In performing all testing and monitoring under this permit, the permittee must follow the procedures approved by the Director. If the permittee is unable to follow the EPA approved procedures, then the permittee must contact the Director at least 30 days prior to testing to discuss options, if any are feasible. When the test report is submitted, a full explanation must be provided as to why any approved procedures were not followed. If the approved procedures were not followed, EPA may take an appropriate action, including but not limited to, requiring the permittee to re-run the test.

References: **§ 146.93 Post-injection site care and site closure.** (a) The owner or operator of a Class VI well must prepare, maintain, and comply with a plan for post-injection site care and site closure that meets the requirements of paragraph (a)(2) of this section and is acceptable to the Director. The requirement to maintain and implement an approved plan is directly enforceable regardless of whether the requirement is a condition of the permit.

Proposed Revision: The permittee shall maintain and comply with the testing and monitoring procedures described in the approved Post-Injection Site Care and Site Closure Plan (Attachment E of this permit) ~~and with~~ to meet the requirements at 40 CFR 144.51(j), 146.88(e), and 146.90. The Post-Injection Site Care and Site Closure Plan is an enforceable condition of this permit. ~~Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Procedures for all testing and monitoring under this permit must be submitted to the Director in an electronic format for approval at least 30 days prior to the test. In performing all testing and monitoring under this permit, the permittee must follow the procedures approved by the Director. If the permittee is unable to follow the EPA approved procedures, then, the permittee must contact the Director at least 30 days prior to testing to discuss options, if any are feasible. When the test report is submitted, a full explanation must be provided as to why any approved procedures were not followed. If the approved procedures were not followed, EPA may take an appropriate action, including but not limited to, requiring the permittee to re-run the test.~~

--OR—

The permittee has submitted the approved Testing and Monitoring Plan, which is included in Attachment C of this permit. This plan includes the information required by Sections 144.51(j), 146.88(e), and 146.90 and demonstrates how each of the applicable requirements will be met. The Testing and Monitoring Plan is an enforceable condition of this permit.

Comment: The procedures are all spelled out in the plan.

The same recommendation and comment were provided for this condition as included in the draft permit for well CCS#2. In response, EPA stated: "As a general matter the UIC permit is intended as a roadmap to identify the relevant requirements and obligations of ADM." CCS#2 Response to Comments at 51.

Pursuant to 40 CFR §144.35(a), complying with the terms of the final permit and the approved Post-Injection Site Care and Site Closure Plan "constitutes compliance" with the requirements of 40 CFR §§144.51(j), 146.88(e), 146.90 and 146.93(b).. This permit shield provision in 40 CFR §144.35(a)

precludes the imposition of an additional obligation to comply with some other interpretation of the requirements of 40 CFR §146.84. By issuing this permit, EPA has determined that compliance with the Area of Review and Corrective Action Plan during the term of the permit constitutes compliance with the requirements at 40 CFR §§144.51(j), 146.88(e), 146.90 and 146.93(b).
Additional support for this comment is provided in the comments on Conditions A and G(1), which are incorporated herein by reference.

2. CSC

Provision: M(1)

Text of Draft Permit: The permittee shall maintain and comply with the testing and monitoring procedures described in the approved Post-Injection Site Care and Site Closure Plan (Attachment E of this permit) and with the requirements at 40 CFR 144.51(j), 146.88(e), 146.90 and 146.93(b). The Post-Injection Site Care and Site Closure Plan is an enforceable condition of this permit. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Procedures for all testing and monitoring under this permit must be submitted to the Director in an electronic format for approval at least 30 days prior to the test. In performing all testing and monitoring under this permit, the permittee must follow the procedures approved by the Director. If the permittee is unable to follow the EPA approved procedures, then the permittee must contact the Director at least 30 days prior to testing to discuss options, if any are feasible. When the test report is submitted, a full explanation must be provided as to why any approved procedures were not followed. If the approved procedures were not followed, EPA may take an appropriate action, including but not limited to, requiring the permittee to re-run the test.

References: **§ 146.93 Post-injection site care and site closure.** (a) The owner or operator of a Class VI well must prepare, maintain, and comply with a plan for post- injection site care and site closure that meets the requirements of paragraph (a)(2) of this section and is acceptable to the Director. The requirement to maintain and implement an approved plan is directly enforceable regardless of whether the requirement is a condition of the permit.

Proposed Revision: The permittee shall maintain and comply with the testing and monitoring procedures described in the approved Post-Injection Site Care and Site Closure Plan (Attachment E of this permit) ~~and with~~ to meet the requirements at 40 CFR 144.51(j), 146.88(e), and 146.90. The Post-Injection Site Care and Site Closure Plan is an enforceable condition of this permit. ~~Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Procedures for all testing and monitoring under this permit must be submitted to the Director in an electronic format for approval at least 30 days prior to the test. In performing all testing and monitoring under this permit, the permittee must follow the procedures approved by the Director. If the permittee is unable to follow the EPA approved procedures, then, the permittee must contact the Director at least 30 days prior to testing to discuss options, if any are feasible. When the test report is submitted, a full explanation must be provided as to why any approved procedures were not followed. If the approved procedures were not followed, EPA may take an appropriate action, including but not limited to, requiring the permittee to re-run the test.~~

--OR—

The permittee has submitted the approved Testing and Monitoring Plan, which is included in Attachment C of this permit. This plan includes the information required by Sections 144.51(j), 146.88(e), and 146.90 and demonstrates how each of the applicable requirements will be met. The Testing and Monitoring Plan is an enforceable condition of this permit.

Comment: The procedures for testing and monitoring are all spelled out in the plan.
The same recommendation and comment were provided for this condition as included in the draft permit for well CCS#2. In response, EPA stated: "As a general matter the UIC permit is intended as a

roadmap to identify the relevant requirements and obligations of ADM." Response to Comments at 52. EPA provided no authority for the assertion that a permit is "intended as a roadmap."
Pursuant to 40 CFR §144.35(a), complying with the terms of the final permit and the approved Post-Injection Site Care and Site Closure Plan "constitutes compliance" with the requirements of 40 CFR §§144.51(j), 146.88(e), 146.90 and 146.93(b).. This permit shield provision in 40 CFR §144.35(a) precludes the imposition of an additional obligation to comply with some other interpretation of the requirements of 40 CFR §146.84. By issuing this permit, EPA has determined that compliance with the Area of Review and Corrective Action Plan during the term of the permit constitutes compliance with the requirements at 40 CFR §§144.51(j), 146.88(e), 146.90 and 146.93(b).
Additional support for this comment is provided in the accompanying comment letter at pages 2-6, and that discussion is incorporated herein by reference.

Response (to comments 1 and 2)

EPA disagrees with the commenters' assertion that "the procedures are all spelled out in the plan." There are a number of tests (e.g., temperature logs, noise logs, pressure fall-off tests, etc.) that may be required by the permit where, to provide flexibility, a testing schedule is written in the permit or project plans, but test procedures are intentionally not written into the permit or project plans. Consistent with other UIC well classes that require similar tests, the procedures are required to be submitted to the Director for approval prior to performing the test. This allows the Director to ensure that the test conforms to EPA guidelines and meets the goal of that test. Review of test procedures before each test also allows for changes due to technological advances or as a result of information from previous tests in the well. Inclusion of these procedures in the permit would negate this flexibility and require ADM to submit a permit modification request each time a change to the detailed procedures would be needed.

In addition, 40 C.F.R. §146.90 and §146.92 makes it clear that ADM must comply with both the permit requirement and the regulatory requirement upon which it is based. For Class VI wells, EPA anticipates that the Testing and Monitoring Plan will be regularly reviewed and revised as required by 40 C.F.R. §146.90(j) and Section M of the Permit. Reference to the relevant regulatory provisions provides clarity on the standards against which any revisions will be judged. 40 C.F.R. § 144.51(j)(i) applies to all UIC permits. It requires all samples and measurements taken for the purpose of monitoring to be representative of the monitored activity. Part N(6)(c) of the permit requires reports of noncompliance including, but not limited to, noncompliance due to failure to follow approved testing and monitoring provisions, and to include the information identified in Part N(3)(b) of the permit. The information required by Part M(1) is consistent with that required by Part N(6)(c). In addition, 40 C.F.R. § 144.54(b) provides that permits shall specify monitoring requirements, and 40 C.F.R. § 144.51(a) provides that permits shall establish a duty to comply with all permit conditions, including monitoring requirements.

The language in 40 C.F.R. §144.35 merely limits the compliance obligations of a permittee to the permit itself, but it does not in any way limit the actual permit terms. There is nothing in the language in 40 C.F.R. §144.35 that precludes the Agency from noting the relevant regulatory provisions in the permit as part of compliance for any permit holder. This makes sense in the context of Class VI permits in particular, because Class VI permits are issued for the life of a facility. As such, EPA anticipates periodic reevaluation to occur during the lifetime of the GS project, and reference to the relevant regulatory provisions provides clarity on the standards against which any revisions will be judged.

Through issuance of a final permit, EPA approves the plans as contained in the permit. However, EPA recognizes that site specific conditions encountered during the project may require alteration of the project plans. If such a situation arises, ADM may propose changes to any plan to the Director. Any

such changes, as the commenters note, would be addressed through permit modification, as specified in Section B of the permit and 40 C.F.R. Part 144. Any future regulatory changes that might affect the permit would also be addressed through permit modification. As a result, consistent with 40 C.F.R. §144.35, the permit continues to be the basis for the permittee's compliance with UIC requirements. In no way is EPA "subverting" the regulations or imposing a stricter regulatory requirement by referring to the regulations in the permit.

Therefore, EPA did not make the suggested changes to the permit.

3. ADM

Provision: M(5) and (6)

Text of Draft Permit: **Ground Water Quality Monitoring**– The permittee shall monitor ground water quality and geochemical changes above the confining zone(s) that may be a result of carbon dioxide movement through the confining zone(s) or additional identified zones. This monitoring shall be performed for the parameters identified in the Post-Injection Site Care and Site Closure Plan at the locations and depths, and at frequencies described in the Post-Injection Site Care and Site Closure Plan to meet the requirements of 40 CFR 146.90(d) and 146.93(b).

External Mechanical Integrity Testing – The permittee shall demonstrate external mechanical integrity as described in the Post-Injection Site Care and Site Closure Plan and Section L of this permit to meet the requirements of 40 CFR 146.90(e) and 146.89.

References: **§ 146.93 Post-injection site care and site closure.** (a) The owner or operator of a Class VI well must prepare, maintain, and comply with a plan for post-injection site care and site closure that meets the requirements of paragraph (a)(2) of this section and is acceptable to the Director. The requirement to maintain and implement an approved plan is directly enforceable regardless of whether the requirement is a condition of the permit.

Proposed Revision: No revisions are necessary for these conditions.

Comment: The language in these conditions succeeds better than other formulations in indicating that compliance with the Testing and Monitoring Plan will "meet the requirements" of the respective regulatory provisions.

4. CSC

Provision: M(5) and (6)

Text of Draft Permit: 5. **Ground Water Quality Monitoring**– The permittee shall monitor ground water quality and geochemical changes above the confining zone(s) that may be a result of carbon dioxide movement through the confining zone(s) or additional identified zones. This monitoring shall be performed for the parameters identified in the Post-Injection Site Care and Site Closure Plan at the locations and depths, and at frequencies described in the Post- Injection Site Care and Site Closure Plan to meet the requirements of 40 CFR 146.90(d) and 146.93(b).

6. **External Mechanical Integrity Testing** – The permittee shall demonstrate external mechanical integrity as described in the Post- Injection Site Care and Site Closure Plan and Section L of this permit to meet the requirements of 40 CFR 146.90(e) and 146.89.

References: **§ 146.93 Post-injection site care and site closure.** (a) The owner or operator of a Class VI well must prepare, maintain, and comply with a plan for post- injection site care and site closure that meets the requirements of paragraph (a)(2) of this section and is acceptable to the Director. The requirement to maintain and implement an approved plan is directly enforceable regardless of whether the requirement is a condition of the permit.

Proposed Revision: No revisions to the language of these provisions are necessary.

Comment: The language in these conditions succeeds better than other formulations in indicating that compliance with the Testing and Monitoring Plan will "meet the requirements" of the respective regulatory provisions.

Response (to comments 3 and 4)

These comments did not request, and do not require, a change to the draft permit.

5. ADM

Provision: M(8)

Text of Draft Permit: (a) The permittee shall use direct methods to track the position of the carbon dioxide plume and the pressure front in the injection zone as described in the Post-Injection Site Care and Site Closure Plan and to meet the requirements of 40 CFR 146.90(g)(1) and 146.93(b).
(b) The permittee shall use indirect methods to track the position of the carbon dioxide plume and pressure front as described in the Post-Injection Site Care and Site Closure Plan and to meet the requirements of 40 CFR 146.90(g)(2) and 146.93(b).

References: **§ 146.90 Testing and monitoring requirements.** The owner or operator of a Class VI well must prepare, maintain, and comply with a testing and monitoring plan to verify that the geologic sequestration project is operating as permitted and is not endangering USDWs. The requirement to maintain and implement an approved plan is directly enforceable regardless of whether the requirement is a condition of the permit. The testing and monitoring plan must be submitted with the permit application, for Director approval, and must include a description of how the owner or operator will meet the requirements of this section, including accessing sites for all necessary monitoring and testing during the life of the project.

§ 146.93 Post-injection site care and site closure. (a) The owner or operator of a Class VI well must prepare, maintain, and comply with a plan for post-injection site care and site closure that meets the requirements of paragraph (a)(2) of this section and is acceptable to the Director. The requirement to maintain and implement an approved plan is directly enforceable regardless of whether the requirement is a condition of the permit.

Proposed Revision: (a) The permittee shall use direct methods to track the position of the carbon dioxide plume and the pressure front in the injection zone as described in the Post-Injection Site Care and Site Closure Plan ~~and~~ to meet the requirements of 40 CFR 146.90(g)(1) and 146.93(b).
(b) The permittee shall use indirect methods to track the position of the carbon dioxide plume and pressure front as described in the Post-Injection Site Care and Site Closure Plan ~~and~~ to meet the requirements of 40 CFR 146.90(g)(2) and 146.93(b).

Comment: By issuing the permit, EPA has determined that implementing the Testing and Monitoring Plan does meet the applicable requirements. The same recommendation and comment were provided for this condition as included in the draft permit for well CCS#2. In response, EPA stated: "As a general matter the UIC permit is intended as a roadmap to identify the relevant requirements and obligations of ADM." CCS#2 Response to Comments at 61. EPA provided no authority for the assertion that a permit is "intended as a roadmap."

Pursuant to 40 CFR §144.35(a), complying with the terms of the final permit and the approved Post-Injection Site Care and Site Closure Plan "constitutes compliance" with the requirements of 40 CFR §146.84. The permit shield provision in 40 CFR §144.35(a) precludes the imposition of an additional obligation to comply with some other interpretation of the requirements of 40 CFR §146.84. By issuing this permit, EPA has determined that compliance with the Area of Review and Corrective Action Plan during the term of the permit constitutes compliance with 40 CFR §§ 146.90(g)(1) and 146.93(b).

Additional support for this comment is provided in the comments on Conditions A and G(1), which are incorporated herein by reference.

6. CSC

Provision: M(8)

Text of Draft Permit: (a) The permittee shall use direct methods to track the position of the carbon dioxide plume and the pressure front in the injection zone as described in the Post-Injection Site Care and Site Closure Plan and to meet the requirements of 40 CFR 146.90(g)(1) and 146.93(b).
(b) The permittee shall use indirect methods to track the position of the carbon dioxide plume and pressure front as described in the Post-Injection Site Care and Site Closure Plan and to meet the requirements of 40 CFR 146.90(g)(2) and 146.93(b).

References: **§ 146.90 Testing and monitoring requirements.** The owner or operator of a Class VI well must prepare, maintain, and comply with a testing and monitoring plan to verify that the geologic sequestration project is operating as permitted and is not endangering USDWs. The requirement to maintain and implement an approved plan is directly enforceable regardless of whether the requirement is a condition of the permit. The testing and monitoring plan must be submitted with the permit application, for Director approval, and must include a description of how the owner or operator will meet the requirements of this section, including accessing sites for all necessary monitoring and testing during the life of the project.

§ 146.93 Post-injection site care and site closure. (a) The owner or operator of a Class VI well must prepare, maintain, and comply with a plan for post- injection site care and site closure that meets the requirements of paragraph (a)(2) of this section and is acceptable to the Director. The requirement to maintain and implement an approved plan is directly enforceable regardless of whether the requirement is a condition of the permit.

Proposed Revision: (a) The permittee shall use direct methods to track the position of the carbon dioxide plume and the pressure front in the injection zone as described in the Post-Injection Site Care and Site Closure Plan ~~and~~ to meet the requirements of 40 CFR 146.90(g)(1) and 146.93(b).
(b) The permittee shall use indirect methods to track the position of the carbon dioxide plume and pressure front as described in the Post- Injection Site Care and Site Closure Plan ~~and~~ to meet the requirements of 40 CFR 146.90(g)(2) and 146.93(b).

Comment: By issuing the permit, EPA has determined that implementing the Testing and Monitoring Plan does meet the applicable requirements of 40 CFR 146.90(g)(1) and 146.93(b).
The same recommendation and comment were provided for this condition as included in the draft permit for well CCS#2. In response, EPA stated: "As a general matter the UIC permit is intended as a roadmap to identify the relevant requirements and obligations of ADM." Response to Comments at 61-62. EPA provided no authority for the assertion that a permit is "intended as a roadmap."
Pursuant to 40 CFR 144.35(a), complying with the terms of the final permit and the approved Post-Injection Site Care and Site Closure Plan "constitutes compliance" with the requirements of 40 CFR §§146.90(g)(1) and 146.93(b). The permit shield provision in 40 CFR §144.35(a) precludes the imposition of an additional obligation to comply with some other interpretation of the requirements of section 146.84. By issuing this permit, EPA has determined that compliance with the Area of Review and Corrective Action Plan during the term of the permit constitutes compliance with sections 146.90(g)(1) and 146.93(b).
Additional support for this comment is provided in the accompanying comment letter at pages 2-6, and that discussion is incorporated herein by reference.

Response (to comments 5 and 6)

As a general matter, the UIC permit is intended as a roadmap to identify the relevant requirements and obligations of ADM. The relevant regulatory provisions are lengthy and technical, and the permit language may summarize those requirements and provide reference to the regulatory details rather than copying them in their entirety. This makes the permit more reader-friendly and easy to follow. Incorporating the additional details by reference does not create any conflict or confusion between the terms of the permit and the regulations.

The language in 40 C.F.R. §144.35 merely limits the compliance obligations of a permittee to the permit itself, but it does not in any way limit the actual permit terms. There is nothing in the language in 40 C.F.R. §144.35 that precludes the Agency from noting the relevant regulatory provisions in the permit as part of compliance for any permit holder. This makes sense in the context of Class VI permits in particular, because Class VI permits are issued for the life of a facility. As such, EPA anticipates periodic reevaluation to occur during the lifetime of the GS project, and reference to the relevant regulatory provisions provides clarity on the standards against which any revisions will be judged.

Through issuance of a final permit, EPA approves the plans as contained in the permit. However, EPA recognizes that site specific conditions encountered during the project may require alteration of the project plans. If such a situation arises, ADM may propose changes to any plan to the Director. Any such changes, as the commenters note, would be addressed through permit modification, as specified in Section B of the permit and 40 C.F.R. Part 144. Any future regulatory changes that might affect the permit would also be addressed through permit modification. As a result, consistent with 40 C.F.R. §144.35, the permit continues to be the basis for the permittee's compliance with UIC requirements. In no way is EPA "subverting" the regulations or imposing a stricter regulatory requirement by referring to the regulations in the permit.

Therefore, EPA has not modified the permit language based upon this comment.

7. ADM

Provision: O(1)

Text of Draft Permit: **Well Plugging Plan** – The permittee shall maintain and comply with the approved Well Plugging Plan (Attachment D of this permit) which is an enforceable condition of this permit and shall meet the requirements of 40 CFR 146.92.

References: **§ 146.92 Injection well plugging.** (b) Well plugging plan. The owner or operator of a Class VI well must prepare, maintain, and comply with a plan that is acceptable to the Director. The requirement to maintain and implement an approved plan is directly enforceable regardless of whether the requirement is a condition of the permit.

Proposed Revision: 1. **Well Plugging Plan** – The permittee shall maintain and comply with the approved Well Plugging Plan (Attachment D of this permit) which is an enforceable condition of this permit and ~~shall~~ meets the requirements of 40 CFR 146.92.

Comment: By issuing the permit, EPA has determined that implementing the Well Plugging Plan does meet the applicable requirements.

The same recommendation and comment were provided for this condition as included in the draft permit for well CCS#2. In response, EPA stated: "As a general matter the UIC permit is intended as a roadmap to identify the relevant requirements and obligations of ADM." CCS#2 Response to Comments at 64. EPA provided no authority for the assertion that a permit is "intended as a roadmap."

Pursuant to 40 CFR §144.35(a), complying with the terms of the final permit and the approved Well

Plugging Plan "constitutes compliance" with the requirements of 40 CFR §146.92. The permit shield provision in 40 CFR §144.35(a) precludes the imposition of an additional obligation to comply with some other interpretation of the requirements of 40 CFR §146.84. By issuing this permit, EPA has determined that compliance with the Well Plugging Plan during the term of the permit constitutes compliance with 40 CFR §146.92.

Additional support for this comment is provided in the comments on Conditions A and G(1), which are incorporated herein by reference.

8. CSC

Provision: O(1)

Text of Draft Permit: 1. **Well Plugging Plan** – The permittee shall maintain and comply with the approved Well Plugging Plan (Attachment D of this permit) which is an enforceable condition of this permit and shall meet the requirements of 40 CFR 146.92.

References: **§ 146.92 Injection well plugging.** (b) Well plugging plan. The owner or operator of a Class VI well must prepare, maintain, and comply with a plan that is acceptable to the Director. The requirement to maintain and implement an approved plan is directly enforceable regardless of whether the requirement is a condition of the permit.

Proposed Revision: 1. **Well Plugging Plan** – The permittee shall maintain and comply with the approved Well Plugging Plan (Attachment D of this permit) which is an enforceable condition of this permit and ~~shall~~ meets the requirements of 40 CFR 146.92.

Comment: By issuing the permit, EPA has determined that implementing the Well Plugging Plan does meet the applicable requirements of 40 CFR 146.92.

The same recommendation and comment were provided for this condition as included in the draft permit for well CCS#2. In response, EPA stated: "As a general matter the UIC permit is intended as a roadmap to identify the relevant requirements and obligations of ADM." Response to Comments at 64. EPA provided no authority for the assertion that a permit is "intended as a roadmap." Pursuant to 40 CFR 144.35(a), complying with the terms of the final permit and the approved Well Plugging Plan "constitutes compliance" with the requirements of 40 CFR 146.92. The permit shield provision in 40 CFR 144.35(a) precludes the imposition of an additional obligation to comply with some other interpretation of the requirements of section 146.92. By issuing this permit, EPA has determined that compliance with the construction plan constitutes compliance with section 146.92.

Additional support for this comment is provided in the accompanying comment letter at pages 2-6, and that discussion is incorporated herein by reference.

Response (to comments 7 and 8)

As a general matter, the UIC permit is intended as a roadmap to identify the relevant requirements and obligations of ADM. The relevant regulatory provisions are lengthy and technical, and the permit language may summarize those requirements and provide reference to the regulatory details rather than copying them in their entirety. This makes the permit more reader-friendly and easy to follow. Incorporating the additional details by reference does not create any conflict or confusion between the terms of the permit and the regulations.

The language in 40 C.F.R. §144.35 merely limits the compliance obligations of a permittee to the permit itself, but it does not in any way limit the actual permit terms. There is nothing in the language in 40 C.F.R. §144.35 that precludes the Agency from noting the relevant regulatory provisions in the permit as part of compliance for any permit holder. This makes sense in the context of Class VI permits in particular, because Class VI permits are issued for the life of a facility. As such, EPA anticipates periodic

reevaluation to occur during the lifetime of the GS project, and reference to the relevant regulatory provisions provides clarity on the standards against which any revisions will be judged.

Through issuance of a final permit, EPA approves the plans as contained in the permit. However, EPA recognizes that site specific conditions encountered during the project may require alteration of the project plans. If such a situation arises, ADM may propose changes to any plan to the Director. Any such changes, as the commenters note, would be addressed through permit modification, as specified in Section B of the permit and 40 C.F.R. Part 144. Any future regulatory changes that might affect the permit would also be addressed through permit modification. As a result, consistent with 40 C.F.R. §144.35, the permit continues to be the basis for the permittee's compliance with UIC requirements. In no way is EPA "subverting" the regulations or imposing a stricter regulatory requirement by referring to the regulations in the permit.

Therefore, EPA has not modified the permit language based upon this comment.

9. ADM

Provision: O(6)(b)

Text of Draft Permit: The permittee shall monitor the site following the cessation of injection to show the position of the carbon dioxide plume and pressure front and demonstrate that USDWs are not being endangered, as specified in the Post-Injection Site Care and Site Closure Plan and in 40 CFR 146.90, and 40 CFR 146.93, including:

References: **§ 146.93 Post-injection site care and site closure.** (a) The owner or operator of a Class VI well must prepare, maintain, and comply with a plan for post-injection site care and site closure that meets the requirements of paragraph (a)(2) of this section and is acceptable to the Director. The requirement to maintain and implement an approved plan is directly enforceable regardless of whether the requirement is a condition of the permit.

Proposed Revision: (b) The permittee shall monitor the site following the cessation of injection to show the position of the carbon dioxide plume and pressure front and demonstrate that USDWs are not being endangered, as specified in the Post-Injection Site Care and Site Closure Plan ~~and in 40 CFR 146.90, and 40 CFR 146.93~~, including:

Comment: By issuing the permit, EPA has determined that implementing the Post-Injection Site Care and Site Closure Plan does meet the applicable requirements.

The same recommendation and comment were provided for this condition as included in the draft permit for well CCS#2. In response, EPA stated: "As a general matter the UIC permit is intended as a roadmap to identify the relevant requirements and obligations of ADM." CCS#2 Response to Comments at 65. EPA provided no authority for the assertion that a permit is "intended as a roadmap."

Pursuant to 40 CFR §144.35(a), complying with the terms of the final permit and the approved Post-Injection Site Care and Site Closure Plan "constitutes compliance" with the requirements of 40 CFR §146.90, and 40 CFR §146.93. The permit shield provision in 40 CFR §144.35(a) precludes the imposition of an additional obligation to comply with some other interpretation of the requirements of 40 CFR §146.90, and 40 CFR §146.93. By issuing this permit, EPA has determined that compliance with the Post-Injection Site Care and Site Closure Plan during the term of the permit constitutes compliance with 40 CFR §§146.90, and 146.93.

Additional support for this comment is provided in the comments on Conditions A and G(1), which are incorporated herein by reference.

10. CSC

Provision: O(6)(b)

Text of Draft Permit: (b) The permittee shall monitor the site following the cessation of injection to show the position of the carbon dioxide plume and pressure front and demonstrate that USDWs are not being endangered, as specified in the Post-Injection Site Care and Site Closure Plan and in 40 CFR 146.90, and 40 CFR 146.93, including:

References: **§ 146.93 Post-injection site care and site closure.** (a) The owner or operator of a Class VI well must prepare, maintain, and comply with a plan for post- injection site care and site closure that meets the requirements of paragraph (a)(2) of this section and is acceptable to the Director. The requirement to maintain and implement an approved plan is directly enforceable regardless of whether the requirement is a condition of the permit

Proposed Revision: (b) The permittee shall monitor the site following the cessation of injection to show the position of the carbon dioxide plume and pressure front and demonstrate that USDWs are not being endangered, as specified in the Post-Injection Site Care and Site Closure Plan ~~and in 40 CFR 146.90, and 40 CFR 146.93~~, including:

Comment: By issuing the permit, EPA has determined that implementing the Post-Injection Site Care and Site Closure Plan does meet the applicable requirements in 40 CFR 146.90, and 40 CFR 146.93. The same recommendation and comment were provided for this condition as included in the draft permit for well CCS#2. In response, EPA stated: "As a general matter the UIC permit is intended as a roadmap to identify the relevant requirements and obligations of ADM." Response to Comments at 65. EPA provided no authority for the assertion that a permit is "intended as a roadmap."

Pursuant to 40 CFR 144.35(a), complying with the terms of the final permit and the approved Post-Injection Site Care and Site Closure Plan "constitutes compliance" with the requirements of 40 CFR 146.90, and 40 CFR 146.93. The permit shield provision in 40 CFR 144.35(a) precludes the imposition of an additional obligation to comply with some other interpretation of the requirements of sections 40 CFR 146.90, and 40 CFR 146.93. By issuing this permit, EPA has determined that compliance with the construction plan constitutes compliance with sections 40 CFR 146.90, and 40 CFR 146.93. Additional support for this comment is provided in the accompanying comment letter at pages 2-6, and that discussion is incorporated herein by reference.

Response (to comments 9 and 10)

As a general matter, the UIC permit is intended as a roadmap to identify the relevant requirements and obligations of ADM. The relevant regulatory provisions are lengthy and technical, and the permit language may summarize those requirements and provide reference to the regulatory details rather than copying them in their entirety. This makes the permit more reader-friendly and easy to follow. Incorporating the additional details by reference does not create any conflict or confusion between the terms of the permit and the regulations.

The language in 40 C.F.R. §144.35 merely limits the compliance obligations of a permittee to the permit itself, but it does not in any way limit the actual permit terms. There is nothing in the language in 40 C.F.R. §144.35 that precludes the Agency from noting the relevant regulatory provisions in the permit as part of compliance for any permit holder. This makes sense in the context of Class VI permits in particular, because Class VI permits are issued for the life of a facility. As such, EPA anticipates periodic reevaluation to occur during the lifetime of the GS project, and reference to the relevant regulatory provisions provides clarity on the standards against which any revisions will be judged.

Through issuance of a final permit, EPA approves the plans as contained in the permit. However, EPA recognizes that site specific conditions encountered during the project may require alteration of the project plans. If such a situation arises, ADM may propose changes to any plan to the Director. Any such changes, as the commenters note, would be addressed through permit modification, as specified in Section B of the permit and 40 C.F.R. Part 144. Any future regulatory changes that might affect the permit would also be addressed through permit modification. As a result, consistent with 40 C.F.R. §144.35, the permit continues to be the basis for the permittee's compliance with UIC requirements. In no way is EPA "subverting" the regulations or imposing a stricter regulatory requirement by referring to the regulations in the permit.

Therefore, EPA has not modified the permit language based upon this comment.

11. ADM

Provision: O(6)(b)(v)

Text of Draft Permit: The permittee shall continue to conduct post-injection site monitoring for the duration of the alternative timeframe approved pursuant to 40 CFR 146.93(c) and the Post-Injection Site Care and Site Closure Plan and until the Director has authorized site closure as described in Section O(6)(c) and O(6)(d) of this permit.

References: **§146.93 Post-injection site care and site closure.** (b) The owner or operator shall monitor the site following the cessation of injection to show the position of the carbon dioxide plume and pressure front and demonstrate that USDWs are not being endangered.

(1) Following the cessation of injection, the owner or operator shall continue to conduct monitoring as specified in the Director-approved post-injection site care and site closure plan for at least 50 years or for the duration of the alternative timeframe approved by the Director pursuant to requirements in paragraph (c) of this section, unless he/she makes a demonstration under (b)(2) of this section. The monitoring must continue until the geologic sequestration project no longer poses an endangerment to USDWs and the demonstration under (b)(2) of this section is submitted and approved by the Director.

(2) If the owner or operator can demonstrate to the satisfaction of the Director before 50 years or prior to the end of the approved alternative timeframe based on monitoring and other site-specific data, that the geologic sequestration project no longer poses an endangerment to USDWs, the Director may approve an amendment to the post-injection site care and site closure plan to reduce the frequency of monitoring or may authorize site closure before the end of the 50-year period or prior to the end of the approved alternative timeframe, where he or she has substantial evidence that the geologic sequestration project no longer poses a risk of endangerment to USDWs.

Proposed Revision: (v) The permittee shall continue to conduct post-injection site monitoring until the Director has authorized site closure under 146.93(b)(2). ~~for the duration of the alternative timeframe approved pursuant to 40 CFR 146.93(c) and the Post-Injection Site Care and Site Closure Plan and until the Director has authorized site closure as described in Section O(6)(c) and O(6)(d) of this permit.~~

-- OR –

(v) The permittee shall continue to conduct post-injection site monitoring for the duration of the alternative timeframe approved pursuant to 40 CFR 146.93(c) and the Post-Injection Site Care and Site Closure Plan and until the Director has authorized site closure as described in Section O(6)(c) and O(6)(d) of this permit. The Director may approve an amendment to the Post-Injection Site Care and Site Closure Plan to reduce the frequency of monitoring or may authorize site closure before the end of the approved alternative timeframe, where he or she has substantial evidence that the

geologic sequestration project no longer poses a risk of endangerment to USDWs pursuant to 40 CFR 146.93(b)(2).

Comment: There are a number of different scenarios that would allow the permittee to cease post-injection monitoring before 50 years, but all involve obtaining authorization for site closure under 40 CFR §146.93(b)(2). Therefore, our preferred revision is sufficient to cover all of those contingencies. The same comment was submitted for the draft permit for well CCS#2 but may not have been adequately explained. Following the cessation of injection, the permittee is requires to conduct post-injection site monitoring and care until approval for closure is obtained from the Director. EPA even recognized this in its CCS#2 Response to Comments by saying: "As the approved Plan, and 40 C.F.R. § 146.93 require, ADM must continue post-injection monitoring and site care until EPA approves ADM's non-endangerment demonstration and authorizes site closure, even if this results in more than 10 years of post-injection monitoring, as described in the currently approved plan." What EPA did not acknowledge in either this statement or in the permit condition is that the Director can also approve closure sooner than the end of the 10-year alternative timeframe if the closure requirements are met. And it is not necessary for the permittee to go through the process of obtaining approval of a shorter alternative post-injection site care period if the permittee can proceed immediately to demonstrate satisfaction of the closure requirements.

EPA's statement in the CCS#2 Response to Comments is correct in observing that "At any time during the life of the GS project, ADM may modify and resubmit the post-injection site care and site closure plan for the Director's approval." CCS#2 Response to Comments at 66. But EPA makes an observation that is too limited when it states: "The language cited by the commenter provides information on the process and standards that would apply if ADM seeks a change." *Id.* The quoted language of 40 CFR §146.93(b)(2) does indeed provide the process and standards for "approv[ing] an amendment to the post-injection and site closure plan," but that is only one of two processes authorized in that provision.

The comment and recommended revision are directed at restoring the other option provided in 40 CFR §146.93(b)(2), which the language of the draft condition O(6)(b)(v) appears to cutoff without any justification. Specifically, 40 CFR §146.93(b)(2) also authorizes a permittee to seek immediate approval of closure without going through the process of plan amendment. That is, 40 CFR §146.93(b)(2) provides in the alternative that the Director "may authorize site closure before the end of the 50-year period or prior to the end of the approved alternative timeframe, where he or she has substantial evidence that the geologic sequestration project no longer poses a risk of endangerment to USDWs." The recommended revision is intended to restore this option.

The 50-year default period and the alternative PISC timeframe are both planning frameworks. The regulations provide that the actual period may be either longer or shorter but must provide for protection of USDWs. The recommended language is intended to recognize this without seeking to undercut either the 50-year or alternative planning timeframe. The proposed language would state: "The permittee shall continue to conduct post-injection site monitoring until the Director has authorized site closure under 40 CFR §146.93(b)(2)." This language inherently recognizes that the actual period may be either longer or shorter than what is provided in the plan and that there will be no cessation of post-injection site monitoring until the closure demonstration can be made. If this more simple formulation is unacceptable, an alternative is offered that is more wordy but should be just as effective in restoring the option of demonstrating closure earlier, as provided in 40 CFR §146.93(b)(2) because it incorporates the language of the rule itself. There is no justification for cutting off that option to make an earlier closure demonstration.

12. CSC

Provision: O(6)(b)(v)

Text of Draft Permit: (v) The permittee shall continue to conduct post-injection site monitoring for the duration of the alternative timeframe approved pursuant to 40 CFR 146.93(c) and the Post- Injection Site Care and Site Closure Plan and until the Director has authorized site closure as described in Section O(6)(c) and O(6)(d) of this permit.

References: 146.93(b) The owner or operator shall monitor the site following the cessation of injection to show the position of the carbon dioxide plume and pressure front and demonstrate that USDWs are not being endangered.

(1) Following the cessation of injection, the owner or operator shall continue to conduct monitoring as specified in the Director-approved post-injection site care and site closure plan for at least 50 years or for the duration of the alternative timeframe approved by the Director pursuant to requirements in paragraph (c) of this section, unless he/she makes a demonstration under (b)(2) of this section. The monitoring must continue until the geologic sequestration project no longer poses an endangerment to USDWs and the demonstration under (b)(2) of this section is submitted and approved by the Director.

(2) If the owner or operator can demonstrate to the satisfaction of the Director before 50 years or prior to the end of the approved alternative timeframe based on monitoring and other site-specific data, that the geologic sequestration project no longer poses an endangerment to USDWs, the Director may approve an amendment to the post-injection site care and site closure plan to reduce the frequency of monitoring or may authorize site closure before the end of the 50-year period or prior to the end of the approved alternative timeframe, where he or she has substantial evidence that the geologic sequestration project no longer poses a risk of endangerment to USDWs.

Proposed Revision: (v) The permittee shall continue to conduct post-injection site monitoring until the Director has authorized site closure under 146.93(b)(2). ~~for the duration of the alternative timeframe approved pursuant to 40 CFR 146.93(c) and the Post- Injection Site Care and Site Closure Plan and until the Director has authorized site closure as described in Section O(6)(c) and O(6)(d) of this permit.~~

-- OR --

(v) The permittee shall continue to conduct post- injection site monitoring for the duration of the alternative timeframe approved pursuant to 40 CFR 146.93(c) and the Post-Injection Site Care and Site Closure Plan and until the Director has authorized site closure as described in Section O(6)(c) and O(6)(d) of this permit. The Director may approve an amendment to the Post-Injection Site Care and Site Closure Plan to reduce the frequency of monitoring or may authorize site closure before the end of the approved alternative timeframe, where he or she has substantial evidence that the geologic sequestration project no longer poses a risk of endangerment to USDWs pursuant to 40 CFR 146.93(b)(2).

Comment: There are a number of different scenarios that would allow the permittee to cease post-injection monitoring before 50 years, but all involve obtaining authorization for site closure under 146.93(b)(2). Therefore, this wording is sufficient to cover all of those contingencies.

The same comment was submitted for the draft permit for well CCS#2 but may not have been adequately explained. Following the cessation of injection, the permittee is requires to conduct post-injection site monitoring and care until approval for closure is obtained from the Director. EPA even recognized this in its response to comments by saying: "As the approved Plan, and 40 C.F.R. § 146.93 require, ADM must continue post-injection monitoring and site care until EPA approves ADM's non-endangerment demonstration and authorizes site closure, even if this results in more than 10 years of post-injection monitoring, as described in the currently approved plan." What EPA did not acknowledge in either this statement or in the permit condition is that the Director can also

approve closure sooner than the end of the 10-year alternative timeframe if the closure requirements are met. And it is not necessary for the permittee to go through the process of obtaining approval of a shorter alternative post-injection site care period if the permittee can proceed immediately to demonstrate satisfaction of the closure requirements.

EPA's statement in the Response to Comments is correct in observing that "At any time during the life of the GS project, ADM may modify and resubmit the post-injection site care and site closure plan for the Director's approval." Response to Comments at 68. But EPA makes an observation that is too limited when it states: "The language cited by the commenter provides information on the process and standards that would apply if ADM seeks a change." *Id.* The quoted language of 146.93(b)(2) does indeed provide the process and standards for "approv[ing] an amendment to the post-injection and site closure plan," but that is only one of two processes authorized in that provision.

The comment and recommended revision are directed at restoring the other option provided in 146.93(b)(2), which the language of the draft condition O(6)(b)(v) appears to cutoff without any justification. Specifically, 146.93(b)(2) also authorizes a permittee to seek immediate approval of closure without going through the process of plan amendment. That is, section 146.93(b)(2) provides in the alternative that the Director "may authorize site closure before the end of the 50-year period or prior to the end of the approved alternative timeframe, where he or she has substantial evidence that the geologic sequestration project no longer poses a risk of endangerment to USDWs." The recommended revision was intended to restore this option.

The 50-year default period and the alternative PISC timeframe are both planning frameworks. The regulations provide that the actual period may be either longer or shorter but must provide for protection of USDWs. The recommended language was intended to recognize this without seeking to undercut either the 50-year or alternative planning timeframe. The proposed language would state: "The permittee shall continue to conduct post-injection site monitoring until the Director has authorized site closure under 146.93(b)(2)." This language inherently recognizes that the actual period may be either longer or shorter than what is provided in the plan and that there will be no cessation of post- injection site monitoring until the closure demonstration can be made. If this more simple formulation is unacceptable, an alternative is offered that is more wordy but should be just as effective in restoring the option of demonstrating closure earlier, as provided in 146.93(b)(2) because it incorporates the language of the rule itself. There is no justification for cutting off that option to make an earlier closure demonstration.

Additional support for this comment is provided in the accompanying comment letter at pages 6-7, and that discussion is incorporated herein by reference.

Response (to comments 11 and 12)

Per 40 C.F.R. § 146.93(a), the owner or operator must submit the post-injection site care and site closure plan as a part of the permit application to be approved by the Director. Among other requirements cited at 40 C.F.R. §146.93(a)(2), the Post-Injection Site Care and Site Closure Plan must include the duration of the post-injection site care timeframe and, if approved by the Director, the demonstration of the alternative post-injection site care timeframe that ensures non-endangerment of USDWs. ADM submitted, and EPA approved, a request for an alternative PISC timeframe, which was incorporated into the Post-Injection Site Care and Site Closure Plan.

As the regulations note, at any time during the life of the project, ADM may present the Director with substantial evidence that the project no longer poses a risk of endangerment to USDWs. This substantial evidence may accompany a modified and resubmitted Post-Injection Site Care and Site Closure Plan from ADM for the Director's approval, at which point the Director may choose to proceed

with a permit modification under Section B (1) or (2) of the final permit as appropriate. EPA does not agree that the Director may authorize site closure prior to the end of the approved post-injection site care timeframe without permit modification, as doing so would lessen the requirements of the permit without offering the opportunity for public comment.

The permit has not been modified based upon this comment.

13. ADM

Provision: PISC E-3 par. 4

Text of Draft Permit: VW#1 will be recompleted (see Figure 2) prior to its use for sampling as described in this plan. The following general procedures will be used to recomplete VW#1.

Proposed Revision: VW#1 may ~~will~~ be recompleted (see Figure 2) prior to its use for sampling as described in this plan. The following general procedures will be used to recomplete VW#1.

Comment: Permittee has not determined if VW#1 will be recompleted.

Response

Well VW#1 is a required monitoring well and is included as such in various locations of the approved Plans for this permit, as well as the CCS#2 permit (IL-115-6A-0001). EPA has reviewed both the existing Westbay system and the potential IntelliZone (or equal) system and finds either to be satisfactory.

This change is incorporated into the final permit, along with additional clarifying language to read: "VW#1 is an integral piece of the monitoring strategy for both ADM CCS#1 and CCS#2. VW#1 has been previously constructed utilizing the Westbay tubing and packer system, which meets the Director's approval. VW#1 may be recompleted (see Figure 2) prior to its use for sampling as described in this plan, or the Westbay system may remain. If VW#1 is recompleted, the following general procedures will be used."

14. ADM

Provision: PISC E-8 Table 3

Text of Draft Permit: **Parameters Analytical Methods** Water Density(field) Oscillating body method

Proposed Revision: **Parameters Analytical Methods** ~~Water Density(field) Oscillating body method~~

Comment: Permittee does not plan to measure the shallow groundwater density. Delete reference to Water Density in this table.

Response

The permit condition referenced in this comment is not required by rule and the ability of EPA to determine compliance with the permit terms will not be adversely affected by this change. Therefore, this change is incorporated into the final permit.

15. ADM

Provision: QASP P-6 Table 1

Text of Draft Permit: Table 1 on Page 6.

Proposed Revision: Delete Table 1 from Page 6 but include the notes at the bottom of the table. Line 1 should be "direct geochemical measurement" rather than "groundwater monitoring."

Comment: Duplication of previous page, last 2 lines can be removed or combined. Line 1 should be "direct geochemical measurement" rather than "groundwater monitoring."

Response

EPA notes the duplicated row in the table and footnotes on page 6 of the QASP. These duplications were deleted in the final permit. EPA could not find the phrase "groundwater monitoring" on page 6 of the QASP, thus this suggested change is not incorporated into the final permit.

16. ADM

Provision: QASP P-14 Table 5

Text of Draft Permit: **Parameters Analytical Methods** Water Density(field) Oscillating body method

Proposed Revision: **Parameters Analytical Methods** ~~Water Density(field) Oscillating body method~~

Comment: Permittee does not plan to measure the shallow groundwater density. Delete reference to Water Density in this table.

Response

The permit condition referenced in this comment is not required by rule and the ability of EPA to determine compliance with the permit terms will not be adversely affected by this change. Therefore, this change is incorporated into the final permit.

17. CSC

Section O(6)(b)(v) incorrectly states that "[t]he permittee shall continue to conduct postinjection site monitoring for the duration of the alternative timeframe approved pursuant to 40 CFR 146.93(c) and the Post-Injection Site Care and Site Closure Plan and until the Director has authorized site closure as described in Section O(6)(c) and O(6)(d) of this permit." The permittee may discontinue post-injection site monitoring earlier than either of those dates if, pursuant to section 146.93(b)(2) the Director "authorize[s] site closure before the end of the 50-year period or prior to the end of the approved alternative timeframe". A permittee is never subject to an absolute requirement to continue monitoring until the end of the approved alternative timeframe, and the permit should not suggest otherwise. Given the potential alternative scenarios for discontinuation of monitoring, it would be more accurate to simply state: "The permittee shall continue to conduct post-injection site monitoring until the Director has authorized site closure."

This same comment was submitted for the draft permit for well CCS#2 but may not have been adequately explained. Following the cessation of injection, the permittee is required to conduct post-injection site monitoring and care until approval for closure is obtained from the Director. EPA even recognized this in its response to comments by saying: "As the approved Plan, and 40 C.F.R. § 146.93 require, ADM must continue post-injection monitoring and site care until EPA approves ADM's non-endangerment demonstration and authorizes site closure, even if this results in more than 10 years of post-injection monitoring, as described in the currently approved plan." Response to Comments at 69. What EPA did not acknowledge in either this statement or in the permit condition is that the Director can also approve closure sooner than the end of the 10-year

alternative timeframe if the closure requirements are met. And it is not necessary for the permittee to go through the process of obtaining approval of a shorter alternative post-injection site care period if the permittee can proceed immediately to demonstrate satisfaction of the closure requirements.

EPA's statement in the Response to Comments is correct in observing that "At any time during the life of the GS project, ADM may modify and resubmit the post-injection site care and site closure plan for the Director's approval." Response to Comments at 69. But EPA makes an observation that is too limited when it states: "The language cited by the commenter provides information on the process and standards that would apply if ADM seeks a change." *Id.* The quoted language of 146.93(b)(2) does indeed provide the process and standards for "approv[ing] an amendment to the post-injection and site closure plan," but that is only one of two processes authorized in that provision.

The comment and recommended revision are directed at reconfirming the other option provided in section 146.93(b)(2), which the language of the draft condition O(6)(b)(v) appears to cut off without any justification. Specifically, section 146.93(b)(2) also authorizes a permittee to seek immediate approval of closure without going through the process of plan amendment. That is, section 146.93(b)(2) provides in the alternative that the Director "may authorize site closure before the end of the 50-year period or prior to the end of the approved alternative timeframe, where he or she has substantial evidence that the geologic sequestration project no longer poses a risk of endangerment to USDWs." The recommended revision is intended to restore this option.

The 50-year default period and the alternative PISC timeframe are both planning frameworks. The regulations provide that the actual period may be either longer or shorter but must provide for protection of USDWs. The recommended language is intended to recognize this without seeking to undercut either the 50-year or alternative planning timeframe. The proposed language would state: "The permittee shall continue to conduct post-injection site monitoring until the Director has authorized site closure under 146.93(b)(2)." This language inherently recognizes that the actual period may be either longer or shorter than what is provided in the plan and that there will be no cessation of post-injection site monitoring until the closure demonstration can be made. If this more simple formulation is unacceptable, an alternative is offered that is more wordy but should be just as effective in restoring the option of demonstrating closure earlier, as provided in section 146.93(b)(2), because it simply incorporates language taken directly from the rule itself. There is no justification for cutting off the option of demonstrating early closure.

Response

Per 40 C.F.R. § 146.93(a), the owner or operator must submit the Post-Injection Site Care and Site Closure Plan as a part of the permit application to be approved by the Director. Among other requirements cited at 40 C.F.R. §146.93(a)(2), the Post-Injection Site Care and Site Closure Plan must include the duration of the post-injection site care timeframe and, if approved by the Director, the demonstration of the alternative post-injection site care timeframe that ensures non-endangerment of USDWs.

ADM submitted, and EPA approved, a request for an alternative PISC timeframe, which was incorporated into the Post-Injection Site Care and Site Closure Plan.

As the regulations note, at any time during the life of the project, ADM may present the Director with substantial evidence that the project no longer poses a risk of endangerment to USDWs. This substantial evidence may accompany a modified and resubmitted Post-Injection Site Care and Site Closure Plan from ADM for the Director's approval, at which point the Director may choose to proceed

with a permit modification under Section B (1) or (2) of the final permit as appropriate. EPA does not agree that the Director may authorize site closure prior to the end of the approved post-injection site care timeframe without permit modification, as doing so would lessen the requirements of the permit without offering the opportunity for public comment.

The permit has not been modified based upon this comment.

SECTION 5. EMERGENCY AND REMEDIAL RESPONSE COMMENTS

1. ADM

Provision: P(1)

Text of Draft Permit: 1. The Emergency and Remedial Response Plan describes actions the permittee must take to address movement of the injection or formation fluids that may cause an endangerment to a USDW during the operation and post-injection site care period. The permittee shall maintain and comply with the approved Emergency and Remedial Response Plan (Attachment F of this permit), which is an enforceable condition of this permit, and with 40 CFR 146.94.

References: **§ 146.94 Emergency and remedial response.** (a) As part of the permit application, the owner or operator must provide the Director with an emergency and remedial response plan that describes actions the owner or operator must take to address movement of the injection or formation fluids that may cause an endangerment to a USDW during construction, operation, and post-injection site care periods. The requirement to maintain and implement an approved plan is directly enforceable regardless of whether the requirement is a condition of the permit.

Proposed Revision: 1. The Emergency and Remedial Response Plan describes actions the permittee must take to address movement of the injection or formation fluids that may cause an endangerment to a USDW during the operation and post-injection site care period. The permittee shall maintain and comply with the approved Emergency and Remedial Response Plan (Attachment F of this permit), which is an enforceable condition of this permit~~, and with 40 CFR 146.94~~.

Comment: Once again, this condition is written in a way that suggests that compliance requires something beyond following the approved Emergency and Remedial Response Plan, which is not the case. The revision recommended here should be adopted and incorporated in the final permit. The same recommendation and comment were provided for this condition as included in the draft permit for well CCS#2. In response, EPA stated: "As a general matter the UIC permit is intended as a roadmap to identify the relevant requirements and obligations of ADM." CCS#2 Response to Comments at 76. EPA provided no authority for the assertion that a permit is "intended as a roadmap."

Pursuant to 40 CFR §144.35(a), complying with the terms of the final permit and the approved Emergency and Remedial Response Plan "constitutes compliance" with the requirements of 40 CFR §146.94. The permit shield provision in 40 CFR §144.35(a) precludes the imposition of an additional obligation to comply with some other interpretation of the requirements of 40 CFR §146.94. By issuing this permit, EPA has determined that compliance with the Emergency and Remedial Response Plan during the term of the permit constitutes compliance with 40 CFR §146.94. Additional support for this comment is provided in the comments on Conditions A and G(1), which are incorporated herein by reference.

2. CSC

Provision: P(1)

Text of Draft Permit: 1. The Emergency and Remedial Response Plan describes actions the permittee must take to address movement of the injection or formation fluids that may cause an endangerment to a USDW during the operation and post-injection site care period. The permittee shall maintain and comply with the approved Emergency and Remedial Response Plan (Attachment F of this permit), which is an enforceable condition of this permit, and with 40 CFR 146.94.

References: **§ 146.94 Emergency and remedial response.** (a) As part of the permit application, the owner or operator must provide the Director with an emergency and remedial response plan that describes actions the owner or operator must take to address movement of the injection or formation fluids that may cause an endangerment to a USDW during construction, operation, and

post-injection site care periods. The requirement to maintain and implement an approved plan is directly enforceable regardless of whether the requirement is a condition of the permit.

Proposed Revision: 1. The Emergency and Remedial Response Plan describes actions the permittee must take to address movement of the injection or formation fluids that may cause an endangerment to a USDW during the operation and post-injection site care period. The permittee shall maintain and comply with the approved Emergency and Remedial Response Plan (Attachment F of this permit), which is an enforceable condition of this permit~~, and with 40 CFR 146.94~~.

Comment: Once again, this condition is written in a way that suggests that compliance requires something beyond following the approved Emergency and Remedial Response Plan, which is not the case. The revision recommended here should be adopted and incorporated in the final permit.

By issuing the permit, EPA has determined that implementing the Emergency and Remedial Response Plan does meet the applicable requirements of 40 CFR 146.94.

The same recommendation and comment were provided for this condition as included in the draft permit for well CCS#2. In response, EPA stated: "As a general matter the UIC permit is intended as a roadmap to identify the relevant requirements and obligations of ADM." Response to Comments at 61-62. EPA provided no authority for the assertion that a permit is "intended as a roadmap." Pursuant to 40 CFR 144.35(a), complying with the terms of the final permit and the approved Emergency and Remedial Response Plan "constitutes compliance" with the requirements of 40 CFR §146.94. The permit shield provision in 40 CFR §144.35(a) precludes the imposition of an additional obligation to comply with some other interpretation of the requirements of section 146.84. By issuing this permit, EPA has determined that compliance with the Emergency and Remedial Response Plan during the term of the permit constitutes compliance with sections 146.94. Additional support for this comment is provided in the accompanying comment letter at pages 2-6, and that discussion is incorporated herein by reference.

Response (to comments 1 and 2)

As a general matter, the UIC permit is intended as a roadmap to identify the relevant requirements and obligations of ADM. The relevant regulatory provisions are lengthy and technical, and the permit language may summarize those requirements and provide reference to the regulatory details rather than copying them in their entirety. This makes the permit more reader-friendly and easy to follow. Incorporating the additional details by reference does not create any conflict or confusion between the terms of the permit and the regulations.

The language in 40 C.F.R. §144.35 merely limits the compliance obligations of a permittee to the permit itself, but it does not in any way limit the actual permit terms. There is nothing in the language in 40 C.F.R. §144.35 that precludes the Agency from noting the relevant regulatory provisions in the permit as part of compliance for any permit holder. This makes sense in the context of Class VI permits in particular, because Class VI permits are issued for the life of a facility. As such, EPA anticipates periodic reevaluation to occur during the lifetime of the GS project, and reference to the relevant regulatory provisions provides clarity on the standards against which any revisions will be judged.

Through issuance of a final permit, EPA approves the plans as contained in the permit. However, EPA recognizes that site specific conditions encountered during the project may require alteration of the project plans. If such a situation arises, ADM may propose changes to any plan to the Director. Any such changes, as the commenters note, would be addressed through permit modification, as specified in Section B of the permit and 40 C.F.R. Part 144. Any future regulatory changes that might affect the permit would also be addressed through permit modification. As a result, consistent with 40 C.F.R. §144.35, the permit continues to be the basis for the permittee's compliance with UIC requirements. In

no way is EPA "subverting" the regulations or imposing a stricter regulatory requirement by referring to the regulations in the permit.

Therefore, EPA has not modified the permit language based upon this comment.

In accordance with 40 C.F.R. §124.19(a), any person who filed comments on the draft permit or participated in the public hearing may petition the Environmental Appeals Board (EAB) to review any condition of the final permit decision. Additionally, any person who failed to file comments or failed to participate in the public hearing on the draft permit may petition the EAB for administrative review of any permit conditions set forth in the final permit decision, but only to the extent that those final permit conditions reflect changes from the proposed draft permit. Any petition shall identify the contested permit condition or other specific challenge to the permit decision and clearly set forth, with legal and factual support, petitioner's contentions for why the permit decision should be reviewed, as well as a demonstration that any issue raised in the petition was raised previously during the public comment period (to the extent required), if the permit issuer has responded to an issue previously raised, and an explanation of why the permit issuer's response to comments was inadequate as required by 40 C.F.R. §124.19(a)(4).

If you wish to request an administrative review, documents in EAB proceedings may be filed by mail (either through the U.S. Postal Service ("USPS") or a non-USPS carrier), hand-delivery, or electronically. The EAB does not accept notices of appeal, petitions for review, or briefs submitted by facsimile. All submissions in proceedings before the EAB may be filed electronically, subject to any appropriate conditions and limitations imposed by the EAB. To view the Board's Standing Orders concerning electronic filing, click on the "Standing Orders" link on the Board's website at www.epa.gov/eab. All documents that are sent through the USPS, except by USPS Express Mail, must be addressed to the EAB's mailing address, which is: Clerk of the Board, U.S. Environmental Protection Agency, Environmental Appeals Board, 1200 Pennsylvania Avenue, NW, Mail Code 1103M, Washington, D.C. 20460-0001. Documents that are hand-carried in person or that are delivered via courier or a non-USPS carrier such as UPS or Federal Express must be delivered to: Clerk of the Board, United States Environmental Protection Agency, Environmental Appeals Board, 1201 Constitution Avenue, NW, WJC East Building, Room 3334, Washington, D.C. 20004.

A petition for review of any condition of a UIC permit decision must be filed with the EAB within 30 days after EPA serves notice of the issuance of the final permit decision. 40 C.F.R. §124.19(a)(3). When EPA serves the notice by mail, service is deemed to be completed when the notice is placed in the mail, not when it is received. However, to compensate for the delay caused by mailing, the 30-day deadline for filing a petition is extended by three days if the final permit decision being appealed was served on the petitioner by mail. 40 C.F.R. § 124.20(d). Petitions are deemed filed when they are received by the Clerk of the Board at the address specified for the appropriate method of delivery. 40 C.F.R. § 124.19(a)(3) and 40 C.F.R. § 124.19(i). The request will be timely if received within the time period described above. For this request to be valid, it must conform to the requirements of 40 C.F.R. § 124.19. A copy of these requirements is enclosed. The regulations are also available electronically at http://www.gpo.gov/fdsys/pkg/CFR-2013-title40-vol23/pdf/CFR-2013-title40-vol23-sec124-19.pdf This request for review must be made prior to seeking judicial review of any permit decision. Additional information regarding petitions for review may be found in the Environmental Appeals Board Practice Manual (August 2013) and A Citizen's Guide to EPA's Environmental Appeals Board, both of which are available at http://yosemite.epa.gov/oa/EAB_Web_Docket.nsf/General+Information/Environmental+Appeals+Board+Guidance+Documents?OpenDocument.

The EAB may also decide on its own initiative to review any condition of any UIC permit. The EAB must act within 30 days of the service date of notice of the Regional Administrator's action. Within a reasonable time following the filing of the petition for review, the EAB shall issue an order either

granting or denying the petition for review. To the extent review is denied, the conditions of the final permit decision become final agency action when a final permit decision is issued by the EPA pursuant to 40 C.F.R. § 124.19(l).

Final Permit

The final permit and Response to Comments document are available for viewing at the Decatur Public Library, 130 N. Franklin Street, Decatur, Illinois.

Please contact Andrew Greenhagen of my staff at (312) 353-7648, or via email at greenhagen.andrew@epa.gov, if you have any questions about the ADM CCS#1 injection well permit.

Tinka G. Hyde
Director, Water Division
U.S. Environmental Protection Agency
Region 5

Date 12/23/14